



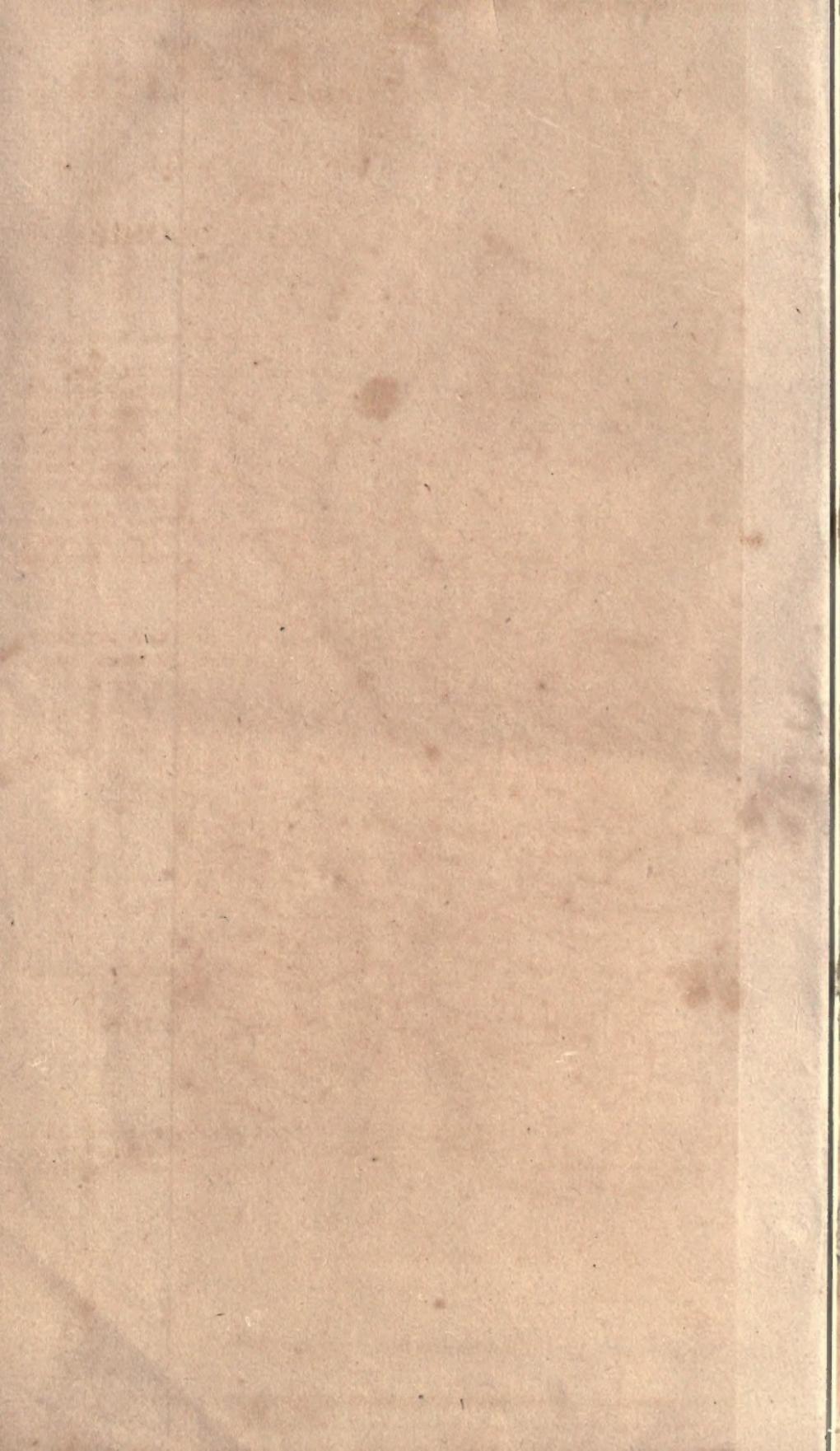


THE LIBRARY
OF
THE UNIVERSITY
OF CALIFORNIA
LOS ANGELES





Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation



THE AMERICAN
UNIVERSAL GEOGRAPHY ;
OR
A VIEW OF THE PRESENT STATE
OF ALL THE
KINGDOMS, STATES, AND COLONIES
IN THE KNOWN WORLD.
IN TWO VOLUMES.

THE FIRST VOLUME

Contains a copious Introduction, adapted to the present improved state of Astronomical Science—a brief Geography of the Earth—a general Description of America—an Account of North-America, and its various Divisions, particularly of the United States—a general Account of the West-Indies, and of the four groups of Islands into which they are naturally divided, and a minute Account of the several Islands—a general Description of South-America, and a particular Account of its various States and Provinces—and a brief De-

scription of the remaining American Islands.

THE SECOND VOLUME

Contains a Geography of the Eastern Continent—a general Description of Europe, and a minute Account of its various Kingdoms and States—a general Description of Asia, its Kingdoms, Provinces, and Islands—an Account of the numerous Islands arranged by modern Geographers under the names of Austral Asia and Polynesia—a general Description of Africa, and a particular Account of its various States and Islands.

TO WHICH ARE ADDED

AN ABRIDGEMENT OF THE LAST CENSUS OF THE UNITED STATES—
A CHRONOLOGICAL TABLE OF REMARKABLE EVENTS FROM THE
CREATION TO THIS TIME—AN IMPROVED LIST OF AN-
CIENT AND MODERN LEARNED AND EMINENT MEN—
AND A COPIOUS INDEX TO THE WHOLE WORK.

THE WHOLE COMPREHENDING A COMPLETE
SYSTEM OF MODERN GEOGRAPHY.

ACCOMPANIED BY A NEW AND ELEGANT

General Atlas of the World,

CONTAINING (IN A SEPARATE QUARTO VOLUME,)
SIXTY THREE MAPS,

Comprising, as far as they could be obtained, all the latest Discoveries to the present time.

BY JEDIDIAH MORSE, D. D. F. A. A. S. H. S.
Minister of the Congregational Church in Charlestown.

SIXTH EDITION.

Arranged on a new plan, and improved in every part by a laborious examination of most of the late respectable Voyages and Travels, in Europe and Asia, by a free use of the information in the Abridgement of Pinkerton's excellent Geography, and by the late admirable Statistical Tables of Hassel.

VOLUME II.

BOSTON :

PUBLISHED BY THOMAS & ANDREWS, AND SOLD, WHOLESALE AND RETAIL,
AT THEIR BOOKSTORE, NO. 45, NEWBURY STREET—MAY, 1814.

Greenough and Stebbins, printers.

UNIVERSAL GEOGRAPHY

A SYSTEMATIC HISTORY OF THE EARTH AND HUMANITY

BY JEDIDIAH MORSE, D. D. F. A. A. S. H.

MINISTER OF THE CONGREGATIONAL CHURCH IN CHARLESTOWN.

SIXTH EDITION.

NEW YORK: PUBLISHED FOR THE AUTHOR BY J. & C. L. LITTLE, AND J. R. MARSHALL.

1812.

DISTRICT OF MASSACHUSETTS, to wit:

District Clerk's Office.

BE IT REMEMBERED, that on the twenty third day of April, A. D. 1812, and in the thirty sixth year of the independence of the United States of America, Thomas and Andrews, of the said district, have deposited in this office the title of a book, the right whereof they claim, as proprietors, in the words following, to wit:

"The American Universal Geography, or a view of the present state of all the kingdoms, states, and colonies in the known world. In two volumes. The first volume contains a copious introduction adapted to the present improved state of astronomical science—a brief geography of the earth—a general description of America—an account of North-America, and its various divisions, particularly of the United States—a general account of the West-Indies, and of the four groupes of islands into which they are naturally divided, and a minute account of the several islands—a general description of South-America, and a particular account of its various states and provinces, and a brief description of the remaining American islands. The second volume contains a geography of the eastern continent—a general description of Europe, and a minute account of its various kingdoms and states—a general description of Asia, its kingdoms, provinces, and islands—an account of the numerous islands arranged by modern geographers under the names of Austral Asia and Polynesia—a general description of Africa, and a particular account of its various states and islands. To which are added, an abridgement of the last census of the United States—a chronological table of remarkable events from the creation to this time—an improved list of ancient and modern learned and eminent men—and a copious index to the whole work. The whole comprehending a complete system of modern geography. Accompanied by a new and elegant general atlas of the world, containing (in a separate quarto volume) sixty three maps, comprising, as far as they could be obtained, all the latest discoveries to the present time. By Jedidiah Morse, D. D. F. A. A. S. H. S. minister of the Congregational church in Charlestown. Sixth edition. Arranged on a new plan, and improved in every part by a laborious examination of most of the late respectable voyages and travels, in Europe and Asia, by a free use of the information in the abridgement of Pinkerton's excellent geography, and by the late admirable statistical tables of Hassel."

In conformity to the act of the congress of the United States, intitled "an act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned;" and also to an act intitled, "an act supplementary to an act, intitled, an act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned; and extending the benefits thereof to the arts of designing, engraving, and etching historical, and other prints."

WILLIAM S. SHAW,
Clerk of the District of Massachusetts.

G121

M825a

V.2

AMERICAN

UNIVERSAL GEOGRAPHY.

PART SECOND.

THE EASTERN CONTINENT,

EMBRACING EUROPE, ASIA, AND AFRICA, WITH THEIR ADJACENT ISLANDS.

EXTENT, BOUNDARIES, POPULATION, CITIES, SEAS, BAYS, SOUNDS, STRAITS, LAKES, RIVERS, MOUNTAINS, DESERTS.

Extent.] THE length of the Eastern Continent, from North Cape, in lat. 71° 10', N. to Cape of Good Hope, is 105° 39' of latitude, or 7340 English miles. Its breadth, from East Cape to the western coast of Norway, is 173° of longitude; which, in the parallel 67°, is 4696 miles. In lat. 38° N. from the Rock of Lisbon, in lon. 9° 35' W. to the eastern coast of Corea, its breadth is 138° 35', or 7557 miles. Cape Verd, the western extremity of Africa, is in lon. 17° 31' W.; and East Cape, the remotest limit of Asia, is in 190° E. Cape Taimour, on the northern coast of Asia, is in lat. 77° N.; and Cape of Good Hope, the southernmost point of Africa, is in lat. 34° 29' S. The number of square miles on this continent is usually calculated at 22,600,000. If the islands belonging to it be added, together with those of Australasia and Polynesia, it may probably amount to 28,000,000.*

Boundaries.] The Frozen Ocean bounds this continent on the N.; the Pacific and Indian on the E.; the Indian and Southern on the S.; and the Atlantic on the W.

Population.] From the best data in our possession, we are led to estimate the population of the Eastern Continent, including Aus-

* The following is Hassel's estimate of the globe:

	English square miles.	German square miles.
Europe,	3,387,019	154,531
Asia, - - - - -	16,728,002	765,908
Africa, - - - - -	11,652,442	531,658
Eastern Continent, - - - - -	31,767,463	1,449,377
Australasia and Polynesia, - - - - -	4,164,420	190,000
America, - - - - -	16,504,254	753,000
Earth, - - - - -	52,486,137	2,392,377

tralasia and Polynesia, at 730,000,000, or about 26 to a square mile. With regard to that of Asia, including Australasia and Polynesia, we follow Pinkerton, and believe, that if Sir George Staunton's account of the population of China be correct, it does not fall short of 500,000,000. With regard to that of Africa we are satisfied from the great population of the empire of Morocco, and the populousness of the country of Soudan, as lately announced by Jackson, that it is at least 50,000,000. In Europe we are guided by Hassel's Tables, which state its population at 179,874,000, or in round numbers 180,000,000.

Cities.] The large cities of this continent are the following, ranged according to their population; Pekin, Nankin, and Canton, in China; Calcutta, in Bengal; London, in England; Ispahan, in Persia; Jeddo, in Japan; Paris, in France; Naples, in Italy; Miaco, in Japan; Fas, in Morocco; Lisbon, in Portugal; Constantinople, in Turkey; Cairo, in Egypt; Moscow and Petersburg, in Russia; Morocco, in Morocco; Aleppo, in Syria; Vienna, in Austria; and Amsterdam, in Holland. All these, in their population, exceed 200,000, the utmost limit to which any of those on the American continent have arrived, and are therefore the largest cities in the world. The following are the cities of the Eastern Continent, which exceed 100,000, and fall short of 200,000, in their population: Damascus, Dublin, Rome, Madrid, Berlin, Venice, Milan, Smyrna, Philippopol, Barcelona, Mequinez, Valencia, Manchester, Hamburg, and Adrianople. Twenty one of the cities in the above lists are in Europe, the whole population of which exceeds 4,946,000; and ten are in Asia, the amount of whose population, according to the best accounts, is upwards of 10,055,000.

Seas.] The MEDITERRANEAN, the largest sea in the world, lies between Spain on the W.; France, Italy, Turkey, and Asia Minor on the N.; Syria on the E.; and Egypt, Tripoli, Tunis, Algiers, and Morocco on the S. It was anciently called the *Great Sea*, the *Grecian Sea*, and likewise by its present name. To the west of Italy it is called the *Tuscan Sea*; between Italy and Turkey, the *Gulf of Venice*, the *Adriatic*; between Turkey and Asia Minor, the *Archipelago*, the *Ægean*; and south of Asia Minor, the *Levant*. Its length, from E. to W. is 2000 miles: its breadth varies from 100 to 800 miles, and probably averages about 400. If this be correct, it covers a surface of 800,000 square miles. The large rivers, which flow directly into the Mediterranean, are the Ebro, Rhone, and Po, from Europe; and the Nile from Africa. The principal islands, which it contains, are Sicily, Sardinia, Corsica, and Majorca, in the Tuscan Sea; Cefalonia and Corfu in the mouth of the Adriatic; Negropont in the Archipelago, Candia near its mouth; and Rhodes and Cyprus in the Levant. The Mediterranean, at its western extremity, is connected with the Atlantic by the Straits of Gibraltar. The Adriatic opens into it through the Straits of Otranto. The Archipelago, at its northeastern extremity, is connected, by the Dardanelles, the ancient *Hellespont*, with the Sea of Marmora, the ancient *Propontis*. This sea, lying between Turkey on the N., and Asia Minor on the

S., is 90 miles long from E. to W., and 40 broad. The Straits of Constantinople, the *Thracian Bosphorus*, unites it with the *Euxine* or Black Sea.

The *EUXINE* is bounded by Turkey and Russia W.; by Russia N.; by Mingrelia and Georgia E.; and by Asia Minor S. Its length from E. to W., according to Tooke, is 800 miles, and its breadth 400. The coast, from Constantinople E. as far as the Phasis, is bold, and the navigation unusually safe. From the Phasis, N. W. to the Kuban, it is very little known. Thence, around the Crimea, to Odessa, it is every where deep and clear. Between Odessa and Constantinople the shore is low, and the soundings decrease gradually, as you approach it. Storms on this sea are not frequent, nor of long duration. The north east is the prevailing wind of summer, which carries vessels very rapidly, in that season, from Caffa to Constantinople. This wind extends to the island of Tenedos. The large rivers, which fall into the *Euxine*, are the Danube, Neister, Bog, and Neiper. It has no islands of any note.

The straits of Caffa, the *Cimerian Bosphorus*, connect it on the N. with the *SEA OF AZOF*, the *Palus Maeotis* of antiquity. This sea, according to Tooke, is 160 miles long, from N. E. to S. W. without including the bay of Taganrok, which is 50 more; and 130 broad. It is every where shallow, and within 30 years has been fast and unaccountably filling up with sand. About 35 years ago, vessels drawing 12 feet water loaded at Taganrok; now they cannot go within twenty miles of it. In consequence of this fact the commerce of this Sea is at present carried on principally by boats. The waters of the Don fall into the northeastern extremity of the Bay of Taganrok.

The *BALTIC* lies wholly in Europe. It opens from the German Sea by a gulf, pointing N. E., called the *Skager Rack*; and afterwards passes S. through what is called the *Cattegat*, and farther on through the Sound of Elsinore, the Great Belt, and the Little Belt, straits formed by the Danish Islands; as far as 53° 50' the latitude of Wismar. From the coasts of Jutland and Holstein its direction is eastward, as far as the western coast of Courland. From the northern shores of Prussia it is N. by E. to its northern extremity, in lat 65° 50'. Its length, from Tornea to Wismar, is about 900 miles, and from Wismar to the Ocean about 450.* Its breadth, between Sweden and Germany, is 75 miles; between, Sweden and Russia, in many places, more than 150. North of lat. 60° it is called the Gulf of Bothnia. The length of this part is about 420 miles.* Immediately below this latitude the Gulf of Finland opens from the east; the length of which is about 300 miles, and its breadth 80.† These two gulfs are frozen over for three months every winter. Between Courland and Livonia, also, the Gulf of Riga opens from the S. E., and is about 60 miles long.‡ The greatest depth of this sea is said not to exceed 50 fathoms; and, according to repeated observations made in Sweden, is stead-

* Arrowsmith's Map.

† Tooke.

‡ Malham.

ily decreasing at the rate of 45 inches in a century.* It is also asserted, that the water does not contain above one thirtieth part of salt; whereas other sea water often holds a tenth. This freshness is imputed to the quantity of ice. And it is likewise said, that, when the north wind blows, the waters become so fresh, that they may even be used for domestic purposes. Tides are unknown, and the fish are few. The great rivers of the Baltic are the Dwina, the Memel, the Vistula, and the Oder. The principal islands are Zealand, Funen, and Laland, Rugen, Bornholm, Gotland, Osel and Aland.

The RED SEA, the *Sinus Arabicus* of the ancients, is the natural boundary between Asia and Africa; having Arabia on the E., and Egypt and Abyssinia on the W. Its length, from N. N. W. to S. S. E., is about 1470 miles, and its common breadth 120. At *Ras al Mohammed*, in lat. 27° 51', it is divided into two gulfs; the Gulf of Akaba, *Sinus Aelaniticus*, on the E.; and the Gulf of Suez, *Sinus Heroopoliticus*, on the W. The latter is about 200 miles long. The former is 90 miles long, and has a ridge of rocks nearly across its mouth, which is 18 miles wide, and is divided by the island Turonc, or Tyron. The old maps incorrectly delineate these gulfs as of equal extent. The bottom of the Red Sea is overspread with trees of coral. All the western shore is bold, and has considerable depth of water. But it is every where rocky, affording no anchoring ground; and there are a number of sunken rocks sufficiently near the surface to destroy a large ship. The eastern coast is a sandy desert; and is lined with many sand islands; the water is less deep, and has a sandy bottom. This, as Bruce supposes, is owing to the flying sand from the Arabian coast, which is driven every winter by the monsoon, in great quantities, into the Sea, and is gradually filling up its harbors, and contracting its limits. The Straits of Babelmandel connect it with a bay of the Arabian Sea. The channel, a little westward of the Straits, is divided by the island of Perim. The northern is 6 miles broad, and has from 12 to 17 fathom of water. The southern is 9 miles broad, and has from 20 to 30 fathom; but is rendered dangerous by rocks.†

The PERSIAN GULF, or *Sea of Ormus*, sometimes also called the *Gulf of Balgora*, and anciently *Persicum Mare*, and *Persicus Sinus*, lies between Persia on the N. E. and Arabia on the S. W. It is 700 miles long, and from 70 to 180 broad. It receives, from the N. W. the waters of the Euphrates and the Tigris, which unite at Gormo, about 100 miles from the sea, and are discharged by a common channel. This sea opens, through the Straits of Ormus, into a bay which sets up from the Arabian Sea.

The WHITE SEA is in the north of European Russia. It opens from the S. W. into the Frozen Ocean. It extends from lat. 63 to 69 N.‡ and is about 500 miles long. Its shores are generally bold and rocky. The water contains but little salt. The tides are small. The fish are whales, morses, porpoises, seadogs, herring,

* Tooke.

† Bruce.

‡ Tooke.

and stockfish. The Dwina, from the S. E., falls into it at Archangel.

The ARABIAN SEA, which may more fitly be denominated a large Bay, sets up from the Indian Ocean, about 1100 miles between Cape Guardefan and Cape Comorin; having Hindostan E. Persia N., Arabia and Africa W. From Cape Guardefan, across its mouth to Cape Comorin, is not less than 1800 miles. The Laccadives and Maldives are two clusters of islands near its southeastern extremity.

Bays.] The BAY OF BENGAL, is on the E. side of Hindostan, having Ava and Malaya on the E. From the parallel of Dondra Head, to the mouth of the Burrampooter, is about 1200 miles; and from the eastern coasts of Hindostan and Ceylon across to Malaya, is about 1250. The Kristna, Godavery, Ganges, Burrampooter, and Irawaddy, all empty into this bay. The Andaman and Nicobar Isles lie near its eastern coast.

The BAY OF OKOTSK opens into the Pacific Ocean, between Cape Lepatka and the Island of Jesso; and into the Sea of Japan, through the Straits of Saghalien. Its northeastern extremity is called the Gulf of Pengina. The length of this bay, from the mouth of the river Pengina to Jesso, is 1300 miles; and its breadth, in lat. 55, is, according to Sauer, about 850. The waters of the Amour are poured into it from the S. E. The large Russian island of Saghalien, or Tchoka, separates it from the Sea of Japan, and the Kurille Islands reach from Lepatka across its mouth to Jesso, a tributary of Japan.

The YELLOW SEA, or *Gulf of Leao Tong*, is merely a bay, setting up between Corea and China, about 400 miles long, and from 100 to 250 broad.* The Hoang-ho falls into it from the W. It opens, from the N. W. into the Pacific.

The BAY OF BISCAY is a large arm of the Atlantic, setting up into Europe between Spain and France. From the E. it receives the Garonne and the Loire.

The GULF OF TONQUIN lies between China and Cochin-China. It is very extensive, but its limits as a bay are not very strongly marked. It opens into the China Sea. The large island of Hainan lies near its mouth. Farther S. the Gulf of Siam opens into the same sea, from the N. W. between Cambodia and Malaya. Its length is about 450 miles, and its breadth 250.

The GULF OF ORY receives the river of the same name in lat. 67 N.† and discharges it into the Frozen Ocean in lat. 73 50.‡ Its direction is from N. N. E. to S. S. W., and its length about 500 miles. Its width is nearly uniform, and no where very great.

Sounds.] The great mass of water lying between Kamtchatka and Tchutskoi W. America E. and Alaska and the Alcatian isles S. is usually called the SEA OF KAMTCHATKA. It is an immense sound opening northward, through Behring's straits, into the

* Crutwell.

† N. B. Lat. and Long. denote that the distance is calculated from the Latitude and Longitude of the extreme points.

‡ Tooke.

Frozen Ocean, and belonging indifferently to either continent. Its northwestern extremity is a large bay, called the *Gulf of Anadyr*; and its southeastern another of inferior size, called *Bristol Bay*. From the Alcatan isles to East Cape, is about 15° of latitude, or 1040 miles; and, from Bristol Bay to the coast of Kamtchatka, about 40° of longitude, on the parallel of 58° 30', or 1450 miles.

CHINA SEA is also an immense sound, lying N. E. and S. W. between Sumatra, Malaya, Cochin-China, Tonquin, and China, on the W. and Borneo, the Philippine Isles, and Formosa on the E. It may be considered as extending from the line of the southern shore of Borneo, in lat. 3° S. to the channel between China and Formosa, in lat. 25° N. upwards of 2000 miles. Its average width probably exceeds 600.

The **SEA OF JAVA** is merely a continuation of the preceding. Commencing at Sumatra, it passes eastward between the Sunda isles, on the S., and Borneo, Celebes, Bouro, and Ceram, on the N., as far as Aroo and the coast of New Guinea; a distance of about 2000 miles.

The **SEA OF JAPAN**, or the *Channel of Tartary*, reaches in a N. N. E. direction, from 35° to 52° N. By the straits of Corea it communicates with the Pacific; and, by the very narrow straits of Saghalien, is connected with the gulf of Ochotsk. Corea and Chinese Tartary limit it on the W. and the islands Niphon, Jesso, and Saghalien on the E. Its length cannot be less than 1400 miles. It is broad between Niphon and Corea. The northern part is much narrower. It has two lateral communications with the ocean; La Peyrouse's straits, between Jesso and Saghalien; and the Straits of Sungaar, between Niphon and Jesso.

The *Channel of Mozambique* lies between Madagascar and Africa, and may be considered as extending the whole length of the island, 840 miles. In its narrowest part it is about 270 miles across.*

The *Channel of Karskoi*, or Kara, is a large arm of the Frozen ocean, lying between the eastern shore of Nova Zembla and Siberia. The Straits of Weggat connect it with the ocean westward.

The **GERMAN OCEAN**, or North sea, is an extensive sound; having Great Britain, the Orkney and Shetland isles, on the W. and Denmark, Holland, the Netherlands, and France, on the E. It reaches from lat. 51° to 60° 17' N. and its length, of course, is 645 miles. This sound has many sand banks. The Goodwin sands off the coast of Kent, are rather dangerous to the mariner, than inviting to the fisherman; but on the coast of Holland there are many banks, which supply excellent fish, as turbot, soal, plaice, &c. Further to the N. is the extensive Dogger bank, stretching S. E. and N. W. beginning about 12 leagues from Flamborough head, and extending about 216 miles toward the coast of Jutland. Between the Dogger and the Well bank, to the S. are the silver-pits of the mariners, abounding with cod. The Ore, and the Lemon banks lie between these banks and the British shores. To

* Crutwell.

the N. E. of the Dogger is the Horn-riff, extending to Jutland. The Jutts-riff is a sand-bank stretching, like a crescent, from the mouth of the Baltic into the German sea.

The ENGLISH CHANNEL is a smaller sound, between the S. of England and the N. W. of France. Its length is 350 miles. Its breadth varies from 21 to 150. It contains the Isle of Wight, and several smaller ones on the French coast. The Straits of Dover connect it with the German Ocean.

ST. GEORGE'S CHANNEL, between Ireland and Great Britain, is larger than the preceding. Its centre is sometimes called the Irish sea ; and the northern end, the N. Channel. It opens into the Atlantic, from the N. E. between Mizen Head and Land's end ; and, from the S. W. between the isle of Isla and the country of Antrim. Taken in this extensive sense its length is upwards of 400 miles ; while its breadth varies from 20 to 170. The isles of Man and Anglesea, with several smaller ones, lie in this channel.

Straits.] The STRAITS OF GIBRALTAR extend from W. to E. 40 miles. In this distance there are three remarkable promontories on the Spanish side, and three opposite to them on the coast of Morocco. The first of these, on the coast of Spain, is cape Trafalgar ; opposite to which is cape Spartel. The next is Tarifa ; and over against it is Malabata. Between these the strait is only 15 miles wide. The third is Gibraltar ; (*Calpe*;) and, on the other side, is *Abyla*, near the town of Ceuta. Gibraltar and Abyla were anciently called the pillars of Hercules.

The DARDANELLES, the ancient *Hellespont*, is a long narrow strait, between Asia Minor and the shore of Turkey. It is 33 miles long, and from half a mile to a mile and a half broad.*

The STRAITS OF CONSTANTINOPLE, the ancient *Thracian Bosphorus*, are about $12 \frac{1}{2}$ miles long, and from half a mile to a mile and a half broad. They lie in a N. E. direction, between Europe and Asia.

The STRAITS OF CAFFA, the ancient *Cimmerian Bosphorus*, lie between the Crimea and Asia.

The STRAITS OF BABELMANDEL are between the Red sea and a bay of the Arabian sea. This bay sets up westward between Cape Guardefan and Cape Fartak. The distance of these capes is 150 miles. After entering the bay from the east, the shores of Arabia and Adel gradually approximate, for the distance of 450 miles, till at the straits they are only 18 miles distant. The straits of Malacca separate Sumatra from the peninsula of Malaya. They may be considered as extending about 150 miles in length, from N. W. to S. E.

The STRAITS OF DOVER, between Dover and Calais, connect the English channel with the German ocean. In the narrowest part they are 21 miles wide. Their breadth is thought to be gradually lessening. The depth, in the straits, is about 25 fathom. On either side it rapidly increases to 100 fathom. The spring tides rise in the straits 24 feet ; the neap-tides 15. The tide from the north is earlier, higher, and more violent than that from the west.

* Encyclopædia.

The STRAITS OF WEYGAT lie between Nova Zembla and Russia.

Lakes.] The CASPIAN, *Mare Caspium*, was anciently called, by the Greeks, the *Hyrcanian sea*. From the mouth of the Ural, in lat. 46° 15', to Astrabat, in 36° 50', it is 650 miles long. Its greatest northern breadth from the mouth of the Wolga to the gulf of Yemba is 265; while its greatest southern breadth, from the mouth of the Orxantes westward to the mouth of the Linkeran, is but 235. Its circumference is 2820 miles, and its area upwards of 36,000. The coast of the Caspian, from the southern mouth of the Wolga round the northern shore and the gulf of Yemba, as far as the Kulala, is flat and swampy, and overgrown with reeds, the waters shallow, and the bottom a thick slime. From the southward round Kulala to the Wolga the country is hilly; and the sea has a bold shore and deep waters. The bottom and the shore, on the north, are universally a coarse shell-sand, lying, layer upon layer, three fathoms deep. The waters of this sea are salt, notwithstanding the immense influx of fresh water from its large and numerous rivers. They are, in many places, more than 450 fathoms deep; and have no visible outlet. There is no perceptible tide. The fish of the Caspian are the sturgeon, sterlet, seal, porpoise, salmon, and herring. The chief rivers which fall into it are the Yemba, Ural, Wolga, Terek, Kur, and Tedjen. It contains a considerable number of Islands, mostly sandy. The principal harbors and roads are those of Derbent, Nisovaia, Baku, Sallian on the Kur, Ensili, Medshetifar, Farabat, Tukaragan and Mangishlak.*

The ARAL lies about 100 miles east of the Caspian. It is about 200 miles long from N. to S., and about 70 broad. The Gihon, thought to be the ancient *Oxus*, falls into its southern extremity; and the Sihon or Sirr, believed to be the *Iaxartes*, flows in from the East. This lake, being surrounded by sandy deserts, has been little explored; but it is salt like the Caspian, and has many small saline lakes in its vicinity.†

The BAIKAL lies in the government of Irkutsk in Siberia, and extends from lat. 51 to above 55. It is upwards of 400 miles long, from N. E. to S. W. and from 20 to 50 miles broad; and is surrounded almost entirely with high and generally bald mountains. The water is uncommonly clear, and usually frozen over from the last of December to the first of May. It is subject to frequent and very violent storms, particularly in September. Here are plenty of seals, herring, and other kinds of fish. The Baikal has some islands, the largest of which is Olkhon, near the sulphur springs. The upper Angara, the Bargusin and the Selinga join it from the N. E. and S. The lower Angara, near its southwestern extremity, conducts its waters to the Yenisea.‡

The LADOGA, in European Russia, flows through the Neva into the gulph of Finland. By the Svir it is connected with the Onega, and by the Volkhof with the Ilmen. It is the largest lake of Europe, being 140 miles long, and 80 broad. On account of its sand-

* Tooke.

† Pinkerton.

‡ Tooke.

banks and its liability to dangerous storms, Peter the Great opened a canal 84 miles in length along its southern shore, from the Volkhof to the Neva. The southern shore is low and sandy.*

ONEGA LAKE lies in the government of Olonetz, between the Ladoga and the White sea. It is about 150 miles long, and from 40 to 60 broad. It has several islands, consisting of marble. A canal of 30 miles would connect the Vitegra, a tributary of the Onega, with the Kofsha, which empties, through the White Lake, into the Wolga.*

Rivers.] The *Hoang-ho* or Yellow river, in China, rises in two lakes, situated among the mountains of that part of Tartary known by the name of Kokonor. They lie, on Arrowsmith's map, in about lat. 35 N. and lon. 97 E. This immense river, as there delineated, pursues a southeasterly direction beyond lon. 101 E. where it turns back to the N. W. and in lon. 99 turning toward the N. descends as far as lat. 42, then running due east to lon. 111, it bends suddenly to the S. to a latitude nearly parallel with its source; and thence pursues an easterly direction till it is lost in the Yellow sea. Its exact length is not known. According to Arrowsmith it cannot be less than 3600 miles.

The KIAN-KU rises near the source of the Hoang-ho, but, according to the map about 200 miles farther W.; and winds to the S. nearly as far as the Hoang-ho does to the N. In making this bend, however, the distance which it actually runs is by no means so great. After washing the walls of Nankin, it enters the sea about 100 miles S. of the Hoang-ho. The Kian-ku near its source is called the *Eluts Peichou*; its course is nearly equal to that of the Hoang-ho; and the two rivers are probably the longest on the eastern continent, unless the Nile and the Niger are one; and are surpassed by none on the globe except the Amazon and the Mississippi. It is a singular fact that these immense rivers, rising in the same mountains, and passing almost close to each other in a particular spot, should afterwards separate to the distance of 15 deg. or 1050 miles, and finally discharge themselves into the same sea, within the small distance of 100 miles.

The LENA takes its rise from an inconsiderable lake situated between the mountains near the Baikal, about 100 miles in a direct line, W. S. W. of Katshuga* landing place in lat. 52 30 N. It flows in a gentle and uninterrupted stream, impeded in a few places by shallows in the summer and autumn, about 300 miles from its source, when it deepens considerably. Its course, though very winding, is generally E. N. E. to Yakutsk, and nearly north thence to its discharge into the Frozen Ocean, in lat. 71 30 N. 127 E. The whole length of this river is about 3450 miles. As you ascend this river its appearance is continually changing. Sometimes mountains covered with forests bound the channel; at others, the banks are barren projecting into the river and turning its course. In some places the mountains retreat for several miles,

* Tooké.

† Katshuga is a village on the Lena in lat. 53 30 N., 107 2 W. (Sauer. p. 19.)

forming a back ground to extensive plains, and exposing a miserably built town, surrounded with cornfields, gardens and pasture grounds, with a few herds of cattle. These openings are frequent, at unequal distances of 4 to 30 miles from each other, and always exhibit villages as far as Olekma, 1457 miles from Katshuga. All beyond is desolate, except a few huts inhabited by convicts, who have the charge of houses for the post ; and the towns of Pokrofsky, Yakutsk, and Gigansk.

The VITIMA is the great eastern branch of the Lena. It flows from a lake E. of the Baikal, and is nearly equal to the Lena itself in width, depth, and extent. Their confluence is 1042 miles from the source of the Lena. Thence to Yakutsk is 890 miles ; where the Lena is more than three miles wide ; thence to the Aldan is 168 ; and thence to the Viluye 162, which falls into the Lena 1188 miles from its mouth.*

The YENISEA is formed by the union of the Siskit and the Tunguska. The Siskit, the western branch, rises in Chinese Soongoria, near the parallel of lat. 50 N. ; and runs first N. W., and afterwards N. The Tunguska, near its source in lat. 48 is called the Scilinga. Its course is N. E. till it enters the Baikal from the S. E. It issues from that lake at the S. W. end, under the name of the Angara, which is afterwards absurdly called the Tungusca. This is the only canal for the waters of the Baikal. The Siskit and the Tunguska unite a little distance above Yeniseisk, and form the Yenisea. Its course thence is nearly N. to lat. 70, where it forms a long narrow bay, the bay of Yenisea, through whose mouth, in lat. 73 30 N. it enters the Frozen Ocean. Its width, at Yenseisk, is nearly a mile. The Uss, the Tuban, and the Kan, flow into the Siskit from the E. ; and the Abakan from the W. Below Yeniseisk the middle and lower Tunguska fall into the Yenisea from the E., and the Yelovi and Turukham from the W. The Yenisea and Siskit are navigable as far as Abakan in lat 54. The two branches flow through a mountainous rocky country and are very rapid streams. The Yenisea near its mouth has a gentle current.† The length of this river does not probably fall much short of that of the Lena.

The OBY also rises in Chinese Soongoria, whence it issues in a copious stream under the name of *Tshu-lishman*, or, as the Tartars call it, *Shabekan*. In lat. 52 N. and lon. 86 E. it falls into lake Teletzkoe, called, by the Tartars, *Altin* or *Altinkul*. Out of this lake it flows under the appellation of the *By*, not taking that of the *Oby*, till its junction with the Katunya. In lat. 67 N. and lon. 69 E. it empties into the gulf of Oby, which unites it with the Frozen Ocean in lat. 73 50 N. and lon. 73 E. From its source to the mouth of the Ket, near lat. 59 N. its shores are mostly high and rocky ; but farther down quite to its mouth, it, generally speaking, flows over a clayey, sandy, or marley bed. It is navigable nearly to the Teletzkol lake ; is uncommonly prolific in fish ; and, in many places, is bordered by forests of large pine and birch trees. Its length, to the head of the gulf, is about 2400 miles,

* Sauer's *Emb.* 23. 24.

† Tooke.

and, thence to the ocean, 500. Its great western branch, the Ir-tish, is thought to be at least as long as the Oby before their confluence. Rising in Chinese Soongoria, it flows into lake Norsai-san in lat. 46 30. Leaving this lake, it enters the Russian territory, and, after a long series of meanders, falls into the Oby in lat. 61 N. and long. 69 E. The Tobol is a large tributary of the Ir-tish from the W. The Oby is the largest river in the Russian empire.*

The NILE has two principal sources. The eastern, the *Abay*, or *Bahar el Asrek*, rises in Geesh in Abyssinia, in lat. 10 59 25 N. and lon. 36 55 30 E.; amid a chain of mountains, about 2 miles above the level of the sea. Its direction is, on the whole, N. E. to lat. 11 45, where it enters the lake Tzana, or Dembea, after a course of about 80 miles. Running 21 miles across the southern end of this lake, it issues from it in lat. 11 40, and pursues a winding southerly course as far as lat. 9 50, its most southern extremity; whence it proceeds N. W. through a mountainous country, falling over several lofty cataracts, particularly one in about lat. 11 35, of 280 feet in height. Continuing the same direction it leaves Sennaar a little on the W. and in about lat. 15 45 receives the great western branch. This branch, according to Rennel, rises in about lat. 7 N. and lon. 25 E. among the Mountains of the Moon; and is called the *Bahar el Abiad*, or the *White river*. This is said by Bruce to be three times as large as the eastern branch, and is now, with great reason, believed to be the same with the Niger. If so, the stream, which rises in lat. 7 N. and lon. 25 E. somewhere in the desert, flows into the Niger, and is merely one of its tributaries. The Nile, thus enlarged, runs N. E. and in about lat. 17 50 receives the Atbara, a large tributary, from the E. rising near the lake Dembea. Thence, after running 140 miles due N. it makes its great western bend, and at Moscho, in lat. 21 flows in lon. 30 40 E. In lat. 22 15 it meets with a chain of mountains and throws itself down the cataract of Janadil; soon after it turns to the N. E. and at Syene in lat. 24 0 45 N. runs in lon. 33 30. Hence its course is N. W. and N. to the Delta in lat. 30, where it divides into two great arms. The western meets the sea 4 miles below Rosetta in lat. 31 28 N. lon. 30 45 E.; the eastern in lat. 31 30 N. lon. 31 53 E. A little below Syene the distance of the Nile from the W. shore of the Red sea is not more than 60 miles. The length of the river from Geesh to the Mediterranean is probably not less than 2500 miles; but the quantity of water which it empties into the sea is small compared with that of many shorter rivers; the greater part of it being probably absorbed in the sands of Nubia.

The NIGER. This river is called, by the Arabs, *Nile el Abeede*, or *Nile of the negroes*. It flows from the foot of the western branch of the Jibbel Kumra, or Mountains of the Moon, where it forms a lake or swamp; and on the west side of the same mountain is another swamp, which is the source of the Senegal, a river flowing westward into the Atlantic. The Niger pursues an easterly direction, and, in its whole course through Soudan, has

* Pinkerton.

towns and villages scattered at little intervals along its banks. About 15 days journey E. of Timbuctoo, it enters the lake or sea of Soudan, a very large lake, though its extent is not precisely known. After leaving this lake it pursues its original course, and either is lost in the sands, or in a lake still farther east, or it is, as both the Arabs and negroes affirm, the great western branch of the Nile Massar or Nile of Egypt. There is but one opinion on this point in Morocco and at Timbuctoo, and the Nile el Abeede and the Nile Massar are constantly spoken of as branches of the same stream. In 1780, Mr. Jackson was informed by a very intelligent man, who had an establishment at Timbuctoo, that an expedition proceeded from a place called Jinnie, lying above that city on the Niger, to Cairo, a voyage of 14 months. They reported that there were 1200 cities and towns, with mosques or towers in them, between Timbuctoo and Cairo, built on or near the banks of the river. They returned with the western caravan to Morocco; and, there joining the southern, reached Jinnie after an absence of 3 years and 2 months. Parke first came upon the Niger in 5 30 W. where it was as large as the Thames at Westminster. It may therefore be considered as rising in lon. 6 30 W. The western branch of the Nile, the Bahar el Abiad, unites with the eastern in lon. 32 45 E. of Greenwich, or 39 51 of lon. from the source of the Niger, which in lat. 12 is in a straight line 2650 miles, and, allowing for windings and difference of latitude, at least 3000. If the Nile and Niger are, according to the Arabian account, one river, its whole length is not probably less than 4700 miles.

The **WOLGA**, or **VOLGA**, the *Rha* and *Araxis* of the ancients, and the *Adel* of the Tartars, is still called *the Rhau* by the Mordvines. It is the great river of Europe, and has its sources in several small lakes among the Valday mountains, in the government of Tver in Russia, the streams of which unite in lat. 56 40 N. lon. 33 34 E. and form the Wolga. Its course is S. E. to Zobtzov, then N. E. to Mologa, then S. E. to Kazan, and then somewhat W. of S. to Tzaritzin, whence it pursues a S. E. course to the Caspian. Its length, according to Tooke, is 3200 miles, and Arrowsmith's map fully justifies the account. It begins to be navigable at Tver in lat. 56 50 N. lon. 36 16 E.; and is every where free from cataracts. Its waters are regularly growing shallower, so as to give grounds for apprehension, that it may one day cease to be navigable for vessels of any tolerable size. Ships, a hundred years ago, could ascend the river to Nishney Novogorod with double the loading, which they can carry at present. It abounds in fish, especially in sterlet, sturgeon, and bielareba. It rolls its waters through many fertile regions, and beautiful forests of oak. In the spring its banks are overflowed. Its tributaries, the Kamma, Okka, and Terek will be described in their places. The Wolga, about 70 miles below Astrachan, empties into the N. W. angle of the Caspian, through nearly 70 mouths. The quantity of its waters is far less than its length would lead one to imagine.

The **AMOOR** has two sources. The northern rises among the Kentaihem mountains, in about lat. 49 N. and 110 E. where it is

called the *Onon*. Running in a N. E. direction to the city of Nortshinsk, in about lat. 52, it receives the Neiza, and takes the name of the Shilka. It continues this direction 180 miles farther to Bakla-nova, at its most northern extremity, in lat. 52 30, where the other branch, the Argoon, joins it from the S. The Argoon issues from a lake on the frontiers of Russia and China, and forms the border of the two empires all the way to its junction with the Shilka. From Bakla-nova the course of the Amoor is nearly S. E. to lat. 47 30, where it receives the Nonni-Ula, a very large river from the S. W. Thence its course is N. E. It receives the Usuri, another considerable river, in lat. 48 30 from the S. E. rising from the lake Hinka, and having a communication after a short day's journey with the sea of Japan. The Amoor empties into the sea of Ochotsk, in about 52 30 N. opposite the island of Saghalien. It is well stocked with fish; and the forests on its banks consist of oak, walnut, birch, and different sorts of pines. The soil is very rich, and the climate mild and healthful. The length of the Amoor is not precisely known. It is probably over 2000 miles.*

The **GANGES** is formed by two branches from the mountains of Kentaisse in Thibet, which run in a direction W. of N. about 300 miles in a direct distance; when, meeting with the great ridge of mount Himmaleh, which extends from Cabul eastward along the N. of Hindostan, they are compelled towards the S. and soon after unite their waters. The united stream, after coasting this ridge of mountains about 100 miles, forces its way through it, in lat. 33, by a vast cavern worn in the rock, called the *Gargontra*, or *Cow's mouth*, and falls into an immense rocky basin below. At Hurdwar it leaves the mountainous tract, after having wandered in it 800 miles, and enters Hindostan. In this country its course is S. and S. E.; till, after passing Benares and Patna, and receiving many large tributaries, it divides at Moorshedabad into two branches. The largest, the Megna, continues the direction of the main river; and at Luckpoor, joining the Burrampooter, forms with it a common estuary at the head of the bay of Bengal. The western branch, called the Hoogley, passes by Calcutta, and runs S. W. to the same bay. Both branches divide into many smaller ones, and almost the whole Delta of the Ganges is a mere marsh, capable of being inhabited only by tygers and alligators. The Hoogley is far the most important branch to the interests of navigation. The length of the Ganges is about 2000 miles, and the quantity of its waters much greater than its length would indicate. In the mouths of this river, the *Bore*, or sudden influx of the tide, rises in both branches to the height of from 5 to 12 feet† in 2 or 3 minutes. Its approach may be heard many miles off, and it sounds like the roaring of the ocean on a surfy beach. It oversets the largest boats, and annually destroys multitudes of lives.

The **BURRAMPOOTER** issues from the opposite side of the same ridge of mountains with the Ganges. It separates from it

eastward more than 1200 miles ; and, after running S. W. through Asam, enters the British territory, and runs S. 400 miles to Luck-poor. The Burampooter, in its length, is thought to equal or surpass the Ganges, and is its noblest tributary.

The DANUBE, the ancient *Ister*, rises from humble fountains, in Donischingen, in Swabia, in about lat. 42° 40' N. and lon. 8° 30' E. It passes through Bavaria, Austria, Hungary, Servia, Bulgaria, Walachia and Moldavia. Its course to Ratisbon is N. E. to Pilsen S. E. and thence S. and S. E. to the Black sea ; which it enters by various mouths, between lat. 44° 55' and 45° 30' N. ; 35 miles below Ismail. Its length is reckoned by different authors to be from 1300 to 1600 miles. It is probably about 1500. It receives in its course more than 60 rivers, and begins to be navigable a little above Ulm, a long distance from its mouth. From its source to the Inn, it is a Bavarian river ; from the Inn to Orsova; half its length,* an Austrian ; and from Orsova to the Euxine, Turkish. From Vienna to Belgrade, in Hungary, it is so broad, that in the wars between the Turks and Christians, ships of war were engaged upon it ; and its conveniency for carriage to all the countries through which it passes, is inestimable. Its stream is rapid, and is broken by many cataracts and whirlpools.

Mountains.] The mountains of this continent do not equal those of the western in their height or the length of their ranges. Most of the high mountains also are separate summits. Those of Europe far surpass in height any that are known in the ranges of Asia.

ALTAI. The Altaian chain, in length, is undoubtedly the second on the globe ; reaching from about 70° E. to the extreme boundaries of Asia, or about 5000 miles. In the east this chain may be considered as commencing in the country of the Tchutski ; where, and for a great distance westward, it has the name of the *Yablon-skoi mountains*. Turning off the Anadyr to the E. and the Kovyma to the north, it pursues a S. W. course, passing between the sources of the Shilka and the Vitima ; till, in about 50° N. it bends nearly W. From this bend, in its progress westward, it is called the *Sayanc mountains* as far as the Yenisea, and is pierced by the remoter branches of that river. Near the Yenisea the chain divides. The northern branch, the Lesser Altai, pursues a westward course, as far as about lon. 70° E. parting Soongoria from the government of Kolhyvan ; and is divided by the Oby and the Irtish. The Great Altai winds south westward round the sources of the Oby and the Irtish, throwing out several considerable ridges towards the N. N. W. On the frontier line of the Soongorian and Mongolian deserts the Bogdo-Alim (the almighty mount) raises its craggy and irregular summit. From it the Changay mountains separate south eastward towards central China, and the Massait range southwards to the mountains of Thibet ; while the main mountain of the Great Altai proceeds westward, mostly bare of forests, and called the *Alak* or *Alak-oola*, and by the Tartars the *Ala-Tau*.†

* Pinkerton.

† Pallas.

We do not know its western termination. From its separation from the lesser Altai none of the great rivers of Asia break through it.* Probably the chain of Belur-Tag is a spur from the western end of this range, connecting it with the range called the *Hindoo-koh*, or *Kentaisse mountains*, and farther east the *mountains of Thibet*.

URAL. This is a Tartarian word signifying a *belt* or *girdle*. The Russians call the range *Kemmenoi*, and *Semnoi*, *Poyas*, i. e. the *Rock*, or *Earth girdle*. These mountains have been incorrectly believed to be the *montes Rhyphaci* and *Rhymnici*, of the antients. They form a natural boundary between Europe and Asia. The range commences between the Caspian and the Aral; attains its greatest height about the sources of the Ural, the Emba, and the Tobol; thence stretches farther north and turns the waters of the Isetz and the Sosva eastward, and those of the Petshora north-westward; and lastly forms two lofty promontories about the Karrian sea. Indeed it may be considered as broken by the straits of Weygat, and reaching its termination in the mountains of Nova Zembla. The length of this range, from its southern extremity to the straits of Weygat, is between 1800 and 2000 miles. The whole range is very rich in minerals; declines incomparably more on the western side than on the eastern; and, on the former, is accompanied by a considerable track of collateral ridge, very rich in copper, and consisting for the most part in schistose sandstone. The southern part of the range, as far as the sources of the Tobol and the Yemba, is called the *Kirghiszi Ural*, and is little known. Between the Tobol and the Sosva it is called the *Uralore mountains*. This part contains the highest summits, sends out several spurs to the westward, and is very rich in ores, particularly copper. The northern part is the *Desert Ural*, and runs almost parallel with the Oby.

ATLAS. The range of Mount Atlas, though well known to the ancients, is far more extensive than they appear to have imagined. It commences near the Atlantic, in the province of Lower Suse in the south western part of Morocco, not far from Cape Bojador, and at first pursues a N. E. course separating that kingdom from Bled el Jezrede.† In about lat. 33° N. it bends more to the east, and passes between the latter country on the south, and Algiers and Tunis on the north. Here it is said to terminate. But it is highly probable that the ridge in Tunis is merely a spur; and that the main ridge runs S. E. through Tripoli towards the desert of Barca. Unfortunately little is known of the eastern Barbary states; and still less of the eastern Atlas. Several spurs are sent out from the western part of the range. One leaves it near its eastern bend, and runs N. W. to the straits of Gibraltar. Another in about lat. 31° N. proceeds N. of W. to Cape Cantin. Another runs westward to Cape de Geer. In Morocco these mountains are said to be rich in copper, iron, lead, sulphur, and saltpetre; and to contain silver, and mines of gold intermixed with lead and antimony.

* Tooke.

† Often improperly spelt *Biledulgerid*.

MOUNTAINS OF THE MOON. The Arabs call these mountains *Jibbel Kumra*; the antients called them *Montes Lunæ*. Both names have the same signification. We have no doubt that the mountains are originally indebted to the Arabs for the appellation. The Romans knew not their situation nor their existence except by report. The Arabs, on the contrary, had prowled over all their summits centuries before the Romans had obtained even this information. The range commences in the western part of Africa, and is there usually named in the maps the *Mountains of Kong*, the name undoubtedly given it by the negroes, who live between these mountains and the gulf of Guinea. The Arabs however call them here, and throughout the whole range, *Jibbel Kumra*. Its course is eastward, dividing the extensive country of Soudan (the southern boundary of Sahara or the Great Desart) from Guinea; and, pursuing its way through many unknown regions, crosses Africa, and is found again in lat. 7 N. at the sources of the Nile in the southern part of Abyssinia. Whether it goes thence eastward through the kingdom of Adel is not known. Far the greater part of this range has been unexplored by the eye of civilization; and we have only Arabic testimony to the identity of the eastern and western parts of the range. Relying on this we estimate its length to be, at least, 40 degrees of longitude, which, taking a mean latitude, is 2730 miles. From the western part of the range the Gambia and the Senegal flow westward, and the Niger eastward. From the eastern and its spurs, flow all the upper branches of the Nile.*

Deserts.] Nothing deserving this name is known in America. the *Pampas* of Paraguay are plains rivalling several of the *Steppes* of Asia in extent; but they are every where covered with grass, and browsed by numberless herds of cattle; while the *Paramos* of Peru and southern Terra Firma, though destitute of cultivation, are not of sufficient extent to be noticed among the general features of a continent.

SAHARA. This immense ocean of sand reaches from the Atlantic to the confines of Egypt, Sennaar, and Abyssinia, a space of 50 deg. or about 3400 miles, by a breadth of 12 deg. or 830 miles. Morocco, Bled el Jezrede and Tripoli lie north of it, and on the S. is the country of Soudan, together with many unexplored regions, the names of which are not yet known.† Its name *Sahara* means the *Desert*, a title which it may fairly claim as an appellative by way of eminence. It is a prodigious expanse of red-sand and sand-stone rock, defying every exertion of human power and industry; but it is interspersed with various islands, or cultivated and inhabited spots of different sizes, called *Oas* or *Oases*, of which Fezzan, lying south of Tripoli, is the largest that has been explored. These Oases serve as resting and watering places for the *Akkabaahs* (accumulated caravans) in their journeys over the desert. At each of them they commonly halt about seven days. In the intermediate stages

(* Jackson's Morocco.)

† Whether the desert of Barca, between Tripoli Proper and Egypt, is an extension of the Sahara northwards in consequence of the termination of the chain of Mount Atlas in the former country, is not, we believe, ascertained.

the *shume* or hot-winds of the desert are often so violent, as to exhale the water carried in skins on the backs of camels. These *shume* blow across the whole desert, and often reach many miles over the Atlantic. They are accompanied by a cloud of dust; and drift the loose sand along plains, which attaches to every fixed object in its course and soon buries it. The intense heat of the sun, aided by the vehement and parching wind, thus driving the sand before it, gives to the desert the appearance of a sea, the drifting sands resembling exactly the waves of the ocean, and hence aptly denominated by the Arabs *El Bahar billa Māa*, a sea without water. In 1805, a caravan proceeding from Timbuctoo to Tafilelt, was disappointed in finding water at one of the *oases*; when, horrible to relate, 2000 men and 1800 camels perished of thirst! Accidents of this sort account for the immense quantities of the bones of men and beasts, which are found mingled together in various parts of the Desert. An account will begin hereafter of the stated caravans between Timbuctoo in Soudan and the kingdom of Morocco. In the more southern parts of Africa there are also deserts of great extent; but we are not possessed of sufficient information to determine their limits, or even their general situation. There is however strong reason to believe, from the discoveries of late travellers, that much the greater part of Africa, south of the Sahara, is fertile and capable of being inhabited.

The Asiatic plains are less desert than those of Africa, being mostly only sandy, with scattered patches of thin grass, and, at wide intervals, a stunted thicket. Those in the north of Asia are called *Stephs*.

Cobi. This is partially or wholly intersected by several chains of mountains. The Mongols call the western part of it *Cobi*; the Chinese, the eastern, *Shamo*. Both are properly considered as one. "Destitute of plants and water it is dangerous for horses; but is safely passed with camels. According to Danville, it reaches from about 80 to 110 E. lon. being 30 deg. which, in lat. 40, is about 1600 miles. In this wide extent are many *oases*; some of them regions of considerable size. On the other hand the main desert sends forth several barren branches in various directions."*

STEPP OF SIBERIA. This immense plain, extending from the Kolyma on the E. to the Oby on the W. and from the Frozen Ocean on the N. to the Tshulim, the Tunguska and the eastward course of the Lena, on the S. Tooke describes it under these divisions, naming them after the great rivers between which they lie. But the mere passage of a river through an extensive plain is not such an interruption of it, as to justify such a division in a general geographical description. Westward of the Yenisea, extensive forests of fine timber are found on the southern parts of the plain, near the mountains; but, near the Frozen ocean, all the wood is low and stunted. Eastward of the Yenisea it is generally described as more like a desert, though near the mountains it is covered with forests. Many hills and elevated places may doubtless be found throughout this vast extent. The distance of the Oby from the mouth of the

* Pinkerton.

Kolyma is about 85 deg. of lon. or 1670 miles. The southern boundary is not so defined by Tooke, as to fix the average width of the plain. Russia contains many smaller plains for which see art. *Russia*.

Arrangement.] After this general sketch of the prominent features of the Eastern Continent, many of which lying between its great divisions could not truly be appropriated to either, we shall proceed to a particular account of **EUROPE**, **ASIA**, and **AFRICA** under their respective civil divisions.

EUROPE, the smallest in extent, and the second in population; but the first in civilization, arts, and arms, is entitled to the earliest consideration. Its divisions, for the reasons formerly assigned, will be arranged in geographical order.

ASIA, twice the cradle of mankind, and containing more than twice the population of the rest of the world; but sunk in ignorance, idolatry, and supineness, and more than half its territory subjugated by Europe; is still the seat of several powerful empires, of extensive manufactures, and of a valuable passive commerce. In relative importance it undoubtedly claims the second place.

In connection with Asia and its islands, we shall describe the large islands generally included under the name of **AUSTRAL-ASIA**, and lying S. E. of the Indian ocean; and the numerous clusters of islands scattered over the Pacific, which have obtained the name of **POLYNESIA**.

AFRICA, enriched by robbery and piracy in the north, and long sunk to the lowest grade of ignorance and barbarism in the interior and the south, is now rising in the scale of civilization and improvement, in consequence of the noble, pious, and benevolent exertions made for the purpose by the British nation. The heat of its climate, its immense deserts, and its want of inland seas, and navigable rivers subject it to peculiar disadvantages in respect to civilization and commerce. The little which is known respecting this part of the globe will close our undertaking.

EUROPE.

Extent.] **T**HIS part of the globe is the smallest in extent, yielding considerably to Africa. From the Portuguese cape, called the Rock of Lisbon, in 35° 30', W. to the Uralian mountains in the east, the length is about 3300 British miles; and the breadth from the North Cape in Danish Lapland, in 71° 10' N. to Cape Matapan, the southern extremity of Greece, in 36° 33', is about 2350. The contents in square miles have been calculated with so great diversity of opinion, such estimates being in truth arbitrary and only comparative, that it is sufficient to mention the medial number of about 2,600,000.*

Limits.] The ancients had no just ideas of the boundaries of Europe, the name itself having seemingly originated from a small

* Hassel says 3,387,019.

district near the Hellespont, as the distinctive name of Asia also spread from the opposite shore. More than a third part of Europe, towards the north and east, has only been known with precision in modern times : on the south, the continental part is limited by the Mediterranean sea, on the west by the Atlantic. In the opinion of several geographers, the Azores or Western Isles are clearly European, being nearer to Portugal than to any other continental land, while the Madeiras, for the same conclusive reason, belong to Africa. On the north, the boundary is the Arctic ocean, embracing the remote isle of Novaya Zemlia, or the New Land. Toward the east the boundaries admit of some discussion. The Uralian mountains are a grand natural limit, from the Arctic ocean to about 56 degrees of north latitude : to the south of which the grand confines of Europe and Asia have been sought in the petty distinctions of Russian governments. More natural limits might be obtained by tracing the river Oufa from its source to its junction with the Belaia. Thence along the Kama to the Volga, which would constitute a striking natural division, to the town of Srepta ; whence a short ideal line, the only one admitted in this delineation, will lead due west to the river Don, which would complete the unascertained boundary ; thence the line passes down that river to the Sea of Azof, and through that sea, the Straits of Kaff, the Euxine, Straits of Constantinople, Marmora, Dardanelles, and Archipelago to the Mediterranean.

ANCIENT DIVISIONS OF EUROPE.

Hibernia. Ireland.

Britannia. Great Britain.

Scandinavia. Norway, Sweden, Lapland Finland and Denmark.

Sarmatia, or Scythia. { Russia, Poland, Prussia and Little Tartary,
countries unknown to the Romans.

Gallia. Holland, Flanders, France, and Switzerland.

Germania. Germany.

Noricum. Austria.

Pannonia. Hungary.

Illyricum. Dalmatia, Bosnia, Croatia, and Sclavonia.

Rhætia and Vindelicia. Tyrol, and the country of the Grisons.

Hispania. Spain, and Portugal.

Baleares vel Balcarides Insulae. Ivica, Majorca, and Minorca.

Coreica.

Sardinia.

Sicilia. Sicily.

Italia. Italy.

Dacia. Moldavia, Wallachia and Transylvania.

Maesia. Servia and Bulgaria.

Epirus. Albania and Canina.

Thracia and Macedonia. Romania.

Thessalia. Janna.

Græcia Propria. Livadia.

Peloponnesus. Morea.

Ancient population.] The ancient population of Europe consisted of the Celts in the west and south; the Fins in the north-east, and the Laps or Laplanders, a diminutive race like the Samoiedes of Asia, in the furthest north, and who seem to have enriched their original rude language by adopting in a great measure that of their more civilized neighbours the Fins. Those ancient inhabitants, who seem to have been thinly scattered, were driven towards the west and north by the Scythians or Goths from Asia, whose descendants occupy the greater part of Europe; by the Sarmatians or Slavonic tribes, also from Asia, the ancestors of the Russians, Poles, &c. and who were accompanied by the Heruli, using what is now called the Lettic speech, to be found in Prussia, Lithuania, Samogitia, Courland, and Livonia, being a-kin to the Slavonic language*, yet many with shades of distinction. From Africa the colony of Iberi, and northern Mauretani, passed into Spain at a very early period. The latter accession of Hungarians and Turks from Asia may likewise be commemorated.

Progressive geography.] The progressive geography of Europe will be more aptly illustrated in the descriptions of each kingdom and state. Suffice it here to observe, that the ablest modern geographers, not excepting D'Anville himself, have greatly erred in their views of the ancient knowledge of Europe. Of Scandinavia the ancients only knew the southern part, as far as the lakes of Weter and Wener. The Roman ships explored the southern shores of the Baltic, as far as the river Rubo or the western Dwina, and discovered the names of several tribes along the shores; but of the central parts of Germany it is evident, from the maps of Ptolemy, that they had no just ideas: so that the tribes, which he enumerates, may be more justly assigned to the northern parts along the Baltic, or to the southern on the left of the Danube. The Carpathian or Sarmatian mountains were well known, but the line of 50 or 52 degrees of north latitude must confine the ancient knowledge in the northeast. A singularity in the ancient descriptions has often misled: for as the mountains in the savage state of Europe were crowned or accompanied with forests, the same term was used in several barbarous languages to express either; so that the ancients often place important mountains where the hand of nature had only planted large forests. This remark becomes essential in the comparison of ancient and modern geography. The Riphæan mountains are incorrectly supposed to have been the Uralian chain, instead of a large forest running from east to west. The Sevo Mons of Pliny, which he positively assigns to the north of Germany, though geographers in direct opposition to his text transfer it to Norway, a region almost as unknown to the antients as America, must be regarded as a vast forest extending to some promontory: and the Venedici Montes of Ptolemy are in the like predicament, for modern knowledge evinces that no such mountains exist. Of all sciences perhaps geography has made the most slow and imperfect progress; and the first restorers of it place at random many grand features

* Tooke's View of Russia, i. 455.

of nature, instead of pursuing the recent and just plan of giving an exact delineation of the country, and afterwards exploring the real extent of ancient knowledge.

Religion.] The christian religion prevails throughout Europe, except in Turkey,* where however at least two thirds of the inhabitants are attached to the Greek church. Wherever the christian faith has penetrated, knowledge, industry, and civilization have followed: among the barbarous tribes in the north the progress was unhappily slow, Scandinavia remaining pagan till the eleventh century; and some Slavonic tribes on the south of the Baltic till the thirteenth; nay, it is not above a century ago since the Laplanders were converted by missions from Denmark. The three great divisions are catholics, protestants, and the Greek church. Hassel states the whole population of Europe at 180,000,000. Of these the catholics compose, according to the best of our information, about 90,000,000. They are found principally in Southern Europe; in Portugal, Spain, France, Italy, Southern Germany, Austria, and the Netherlands. There are also about 3,000,000 in Ireland. The number of protestants is about 49,000,000. They inhabit Great-Britain, Sweden, Denmark, Prussia, Northern Germany, and Holland; and are found in considerable numbers in Ireland, Switzerland, and the Austrian empire. The christians of the Greek church, in Europe, are about 38,000,000 in number. They compose the population of Russia, and two thirds of that of Turkey. The remaining three millions are Mahometan Turks.

The general prevalence of the christian religion has been followed by another superlative advantage, that of constituting all Europe, as it were, into one republic, so that any useful discovery made in one state, passes to the rest with celerity.

Climate.] This fair portion of the globe is chiefly situated in the temperate zone: if such distinctions have not vanished from geography, since modern discoveries have evinced, that the climate often depends on local causes; that the Alps in a southern latitude present mountains of ice unknown in Lapland; that the torrid zone abounds with water and habitations, and may perhaps contain mountains covered with snow. Yet freedom from the excessive heats of Asia and Africa has contributed to the vigor of the frame, and the energy of the mind.

Governments.] The kingdoms and states of Europe may be considered, 1. As despotic monarchies, as those of Russia, Turkey, and France: 2. Absolute monarchies, as Austria, Spain, Denmark, Sweden, &c.: or, 3. Limited monarchies, as the kingdom of Great Britain. Since the fall of Venice, and the subversion of Switzerland and Holland, scarcely an example occurs of permanent and fixed aristocracy, or the hereditary government of nobles. And not a republic is now to be found throughout Europe.

Arrangement.] According to the plan of this work already explained, the various states of Europe will be arranged according

* It is said that a few of the Laplanders are still heathens.

to their geographic order; and each will be treated at a length proportioned to its weight in the political scale, and the consequent interest which it inspires. A small state may indeed sometimes excite a more just curiosity, than one of larger dimensions; but such considerations are foreign to an exact system of geography, detailed in a precise order of topics, and extended with impartial views over the whole circle of human affairs. The changes, which have taken place in Europe within the last 30 years, have been so numerous and so extensive, that a map of its present political divisions would give no just idea of those, which then existed. But a knowledge of these last is probably not less useful to the man of general information, than of the first. We propose, therefore, to give a *very brief* sketch of those countries which are now divided, or subjected to a foreign government; and likewise to state the late and present boundaries and extent of others where they have been materially altered.

As the British empire is unconnected with the continent, and a geographical arrangement would be violated by inserting it between any of the continental states, the first description shall be that of the British Dominions. The Danish empire, Sweden, Russia, Poland, Prussia, Holland, Netherlands, France, Switzerland, Germany, Austria, Spain, Portugal, Italy and Turkey will follow in the order here specified.

Authorities.] The abridgment of Pinkerton, lately published in London, will be the basis of our geography of most of the countries of Europe. Large additions, however, and many alterations will be made from later and more correct travels and documents. Where the sources of information are official, no reference will be made to them. In other cases the authorities for important facts will always be given.

BRITISH EMPIRE.

1. IN EUROPE:

England,	Scilly Isles,
Wales,	Guernsey,
Scotland,	Jersey,
Ireland,	Alderney,
Shetland Isles,	Sark,
Orkney Isles,	Heligoland,
Hebrides,	Gibraltar,
Isle of Man,	Malta.
Anglesea,	

2. IN ASIA.

Presidency of Calcutta,	British Sumatra,
Presidency of Madras,	Amboyna,
Presidency of Bombay,	British New Holland,
Northern Hindostan,	New South Wales,
British Ceylon,	Norfolk Island.

3. IN AFRICA.

Cape of Good Hope,	Sierra Leona,
Isle of Helena,	Madeiras,
James' Island,	Isle of Bourbon,
Annabon,	Isle of France.

4. IN NORTH AMERICA.

Labrador,	Nova Scotia,
New North Wales,	Cape Breton I.
New South Wales,	St. John's I.
Newfoundland I.	Anticosti I.
Lower Canada,	Bermudas I.
Upper Canada,	Nootka Sound.
New Brunswick,	

5. IN THE WEST INDIES.

Bahamas,	Guadaloupe,
Jamaica,	Deseada,
St. Thomas,	Marigalante,
Tortola,	Dominica,
Amegada,	Martinico,
St. Martin's,	St. Lucia,
Santa Cruz,	St. Vincent,
Saba,	Barbadoes,
St. Eustatia,	Grenada,
St. Christopher's,	The Grenadines,
Anguilla,	Tobago,
Barbuda,	Trinidad,
Antigua,	Bonair,
Nevis,	Curacao.
Montserrat,	

6. IN SOUTH AMERICA.

British Guiana,	Cayenne.
-----------------	----------

ENGLAND.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, ORIGINAL POPULATION, HISTORICAL EPOCHS, ANTIQUITIES, RELIGION, GOVERNMENT, JUDICATURE AND LAWS, ARMY, NAVY, REVENUE, POLITICAL IMPORTANCE AND RELATIONS, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, ARTS, EDUCATION, UNIVERSITIES, CITIES, ROADS, INLAND NAVIGATION, MANUFACTURES AND COMMERCE.

Names.] THE Phenicians are generally supposed to have discovered Great Britain and Ireland at a very early period; and some suppose that the name of Britain originates from a Phenician word; while others with more probability infer

it to have been an indigenous term derived from the Brets, tribes of which appellation may be traced in Gaul and Scythia. Among the first objects of the Phenician intercourse was tin, whence the Greek name of *Cassiterides*, or the islands of tin; a name which, in its first acceptation, seems to have extended to Great Britain and Ireland, though afterwards confined to the isles of Scilly, where the metal does not appear to have been traced in modern times.

The name of Anglia or England is well known to have originated from the Angles, a nation of the Cimbric Chersonese or modern Jutland, who settled in the northern parts in the fifth century. The ecclesiastical history of Beda, written in that part of the country which was possessed by the Angli, seems to have contributed greatly to the extension and general acceptation of the modern name.

Extent.] The island of Great Britain extends from fifty to fifty-eight and a half degrees of north latitude, being of course 588 miles in length. Its greatest breadth, from the Land's End to the North Foreland in Kent, is 370 miles. Its extent in square miles is computed at 77,243.

England is bounded on the east by the German Ocean; on the south by the English Channel; on the west by St. George's Channel; on the north by the Cheviot Hills, by the river Tweed, and an ideal line falling southwest down to the Frith of Solway. The extent of England and Wales in square miles is computed at 49,450; and the population being estimated at 8,400,000, the number of inhabitants to a square mile will of course be 169.

Original population.] The earliest inhabitants of England are supposed to have been the Gael or southern Celts, called Guidels by the Welch, who regard them as their predecessors. Those tribes seem to have arrived from the nearest shores of France and Flanders, and were followed by the Cymri or Cimbri from the same regions whence the Angles afterwards proceeded. But the Cimbri were northern Celts, the ancestors of the modern Welsh. The Scythians or Goths from Asia having seized on Germany and a great part of Gaul, gradually repelling the Celts towards the west, appear to have sent colonies into England three or four centuries before the Christian era; for Cæsar found many tribes of the Belgæ, a German or Gothic nation, established on the south and east of Britain. Those Belgæ may be justly regarded as the chief ancestors of the English nation; for the Saxons, Angles, and other northern invaders, though of distinguished courage, were inconsiderable in numbers, and the English language bears more affinity to the Frisic and Dutch, than to the Jutlandic or Danish.

Under the dominion of the Romans even the Belgic colonies, unaccustomed to the use of arms, had forgotten their former valor in the course of four centuries of subjection. Pressed by ferocious invaders, they seem to have invited to their assistance dangerous allies from the continent. The Jutes arrived in the year 449, and founded the kingdom of Kent, about the year 460; they also took possession of the isle of Wight. In 477 the Sax-

ens first appear, and the kingdom of the South Saxons commences at that epoch. The West Saxons arrived in the year 495. The sixth century was considerably advanced when those barbaric colonies were increased by the East Saxons in the year 527; but the first appearance of the great branch of the Angles, who were to perpetuate their name in the country at large, did not occur till the year 547, when the valiant Ida led his troops to Bernicia. The East Angles taking possession of Norfolk in the year 575, the southern and eastern coasts were almost wholly in the power of the invaders, who, soon extending their conquests into the interior of the country, founded, in the year 585, the kingdom of Mercia, the last of the Heptarchy. Bede pronounces Mercia to have been an Anglic kingdom; and if so, their population might perhaps have equalled that of the Saxons themselves.

Progressive Geography.] The knowledge of the progressive geography of any country is indispensably necessary for the elucidation of its history. When the Romans invaded Britain, the chief states, in what is now England and Wales, were the *Cantii*, inhabiting Kent; *Trinobantes*, Middlesex; *Belgae*, or *Regni*, Hampshire, Wiltshire, and Somersetshire; *Durotriges*, Dorsetshire; *Damnonii*, Devonshire and Cornwall; *Atrebates*, Berkshire; *Silures*, South Wales; *Ordovices*, North Wales; *Icenii*, Essex, Suffolk, Norfolk, &c. *Brigantes*, Yorkshire.

In the Roman period England was divided into the following large provinces.

Britannia Prima, the whole southern part as far as the mouths of the Severn and the Thames.

Britannia Secunda, Modern Wales.

Flavia Cæsariensis, from the Thames to the Humber.

Maxima Cæsariensis, from the Humber to the Tyne, from the Mersey to the Solway.

A more detailed account of the Roman divisions of England properly belongs to ancient geography, and the curious reader may be referred to the works of Horsley and Roy, authors of deserved estimation.

Of the Saxon geography an idea may be derived from the following table.

1. Kent comprehended the county of Kent.
2. Sussex or the South { Sussex.
Saxons,
 { Surrey.
 { Norfolk.
3. East Angles,
 { Suffolk.
 { Cambridgeshire, with the isle of Ely.
 { Cornwall.
 { Devonshire.
4. Wessex, or the West { Dorset.
Saxons,
 { Somerset.
 { Wilts.
 { Hants.
 { Berks.

ENGLAND.

5. Northumberland,

Lancashire.
Yorkshire.
Durham.
Cumberland.
Westmoreland.
Northumberland, and the parts of Scotland to the Frith of Edinburgh.

6. Essex, or the East Saxons,

Essex.
Middlesex.
Hertfordshire in part:

Gloucester.
Hereford.
Warwick.
Worcester.
Leicester.
Rutland.
Northampton.
Lincoln.
Huntingdon.
Bedford.
Buckingham.
Oxford.
Stafford.
Derby.
Salop.
Nottingham.
The rest of Hertfordshire.

7. Mercia,

The division into shires is said to have been instituted by the great Alfred. These departments are also styled counties, as having been each governed by a Count, in the Saxon times styled Ealdorman, and, after the Danish conquest, called Earl, from the Danish Jarl, implying a great man. The dignity and title becoming hereditary, the government of the county devolved upon the Earl's deputy the Shire-reeve, sheriff or manager of the shire. Yorkshire being very extensive, it was divided into three parts called in Saxon *trithings*, as a farthing is a fourth part, and now corruptly called Ridings.

England proper is divided into forty counties, and the principality of Wales into twelve, thus making the whole number of counties in South Britain fifty-two; of which the following is a list, together with their respective number of inhabitants, and chief towns.

Six northern counties

	Number of Inhabitants according to the late enumeration. (1801.)	Chief Towns.
Northumberland	157,101	Newcastle
Cumberland	117,230	Carlisle
Durham	160,361	Durham
Yorkshire	563,953	York
Westmoreland	41,617	Appleby
Lancashire	672,731	Lancaster

		Number of Inhabitants according to the late enumeration. (1801.)	Chief Towns.
Four bordering on Wales	Cheshire	191,751	Chester
	Shropshire	167,639	Shrewsbury
	Herefordshire	89,191	Hereford
	Monmouthshire	45,582	Monmouth
	Nottinghamshire	140,350	Nottingham
	Derbyshire	161,142	Derby
	Staffordshire	239,153	Stafford
	Leicestershire	130,081	Leicester
	Rutlandshire	16,356	Okeham
	Northamptonshire	131,757	Northampton
Twelve midland	Warwickshire	208,190	Warwick
	Worcestershire	139,333	Worcester
	Gloucestershire	250,809	Gloucester
	Oxfordshire	109,620	Oxford
	Buckinghamshire	107,444	Aylesbury
	Bedfordshire	63,393	Bedford
	Lincolnshire	208,557	Lincoln
	Huntingdonshire	37,568	Huntingdon
	Cambridgeshire	89,346	Cambridge
Eight eastern	Norfolk	273,371	Norwich
	Suffolk	210,431	Ipswich
	Essex	226,437	Chelmsford
	Hertfordshire	97,577	Hertford
	Middlesex	535,329*	London
	Surrey	269,043	Guilford
Three south- eastern	Kent	307,624	Maidstone
	Sussex	159,311	Lewes
	Berkshire	109,215	Reading
Four southern	Wiltshire	185,107	Salisbury
	Hampshire	219,656	Winchester
	Dorsetshire	115,319	Dorchester
Three south- western	Somersetshire	273,750	Taunton
	Devonshire	343,001	Exeter
	Cornwall	188,269	Launceston
	Flintshire	39,622	Flint
	Denbighshire	60,352	Denbigh
Six, North Wales	Caernarvonshire	41,521	Caernarvon
	Anglesey	33,806	Beaumaris
	Merionethshire	29,506	Bala
	Montgomeryshire	47,978	Montgomery
	Radnorshire	19,050	Presteign
	Cardiganshire	42,956	Cardigan
Six, South Wales	Pembrokeshire	56,280	Pembroke
	Caermarthenshire	67,317	Caermarthen
	Brecknockshire	33,633	Brecknock
	Glamorganshire	71,525	Gaerdiff

* Exclusive of the capital.

It is also generally believed that Alfred founded the subdivisions of counties called Hundreds and Tythings, now seldom mentioned, except in legal proceedings and in topographical descriptions. The Hundred probably contained one hundred farms, while the Tything was restricted to ten.

In the Norman period of English history few alterations of consequence appear in the geography. Cumberland and Westmoreland were wrested from the Scots; and the provinces north of the Humber, which had maintained a kind of independence after the extinction of the Danish kingdom of Northumbria, were completely incorporated with the monarchy. On the west, Henry I. about the year 1120, having conquered a part of Wales, invited and established a Flemish colony in Pembrokeshire, and one or two others of the most southern counties, which afterwards became remarkable for industry. The subsequent conquest of Wales by Edward I. and its gradual association with England, are sufficiently known.

- Historical epochs.]*
1. The population of England by the Celts.
 2. The Belgic colonies, who introduced agriculture.
 3. The Roman conquest. Britain was only seen by Julius Cæsar. The Roman conquest began in the reign of Claudius, and in that of Domitan the Roman Eagle had been dispayed as far as the Grampian mountains.
 4. The arrival of the Saxons and Angles in the fifth century.
 5. The Danish conquest A. D. 1016. The Danish monarchs of England were Canute, Harold, and Hardicanute; but the sceptre returned to the Saxon line A. D. 1042.
 6. The Norman conquest, A. D. 1066.
 7. The great charter granted by John at Runymede.
 8. Not to mention the conquest of Wales and the temporary subjugation of Scotland, the civil wars between the houses of York and Lancaster may be regarded as the next memorable epoch.
 9. The reformation introduced by Edward VI. and Elizabeth.
 10. The civil wars under Charles I.
 11. The Revolution.
 12. The war with the American colonies forms not only an epoch of singular novelty, but of the most important consequences.

Antiquities.] The ancient monuments of a country are intimately connected with the chief epochs of its history, and particularly with the revolutions it has undergone by foreign conquest or new population. The English antiquities fall of course into six divisions. 1. Those belonging to the primitive Celtic inhabitants. 2. Those of the Belgic colonies. 3. Those of the Romans. 4. Those of the Saxons. 5. Reliques of the Danes. 6. Norman monuments. Few of those remains, it must be confessed, throw much light upon history; but many of them being interesting and curious in themselves, they deserve the attention of the traveller and geographer.

Those of the first Celtic inhabitants were probably, as usual among savage nations, constructed of wood, and of course there can be no remains. Some rude barrows and heaps of stones may

perhaps belong to the Druidic tribes, but Stonehenge, the large Barrows or tumuli, &c. &c. more probably belong to the Belgic colonies. Stonehenge is situated near the capital of the ancient Belgae, and there is a similar monument, but said to be of far greater extent, near Vannes, a town on the French coast, which was possessed by the Belgae. Similar monuments also occur in Denmark and Sweden, and in Iceland even the date of erection is sometimes ascertained, these circles being familiarly known by the name of *Domh-ringr*, that is literally Doom-ring or Circle of Judgment, being the solemn places where courts were held. Yet Stonehenge will be found, on inspection, to fall short of the ridiculous exaggerations of antiquaries, impressing every traveller, after the perusal of such accounts, with disappointed ideas of smallness and want of importance. Such ideas are however unjust, as it is a noble and curious monument of early times. There appear to be three principal circles of stones, the outer connected together by an uniform pavement as it were at the top, to which the chiefs might ascend and speak to the surrounding crowd. A second circle consists of detached upright stones about five feet in height, while the highest are eighteen. Within this is a grand oval, originally consisting of five trilithons of two huge stones crossed by another at the top and inclosing smaller stones, which seem to have been seats, and a large flat stone commonly called the altar, but which seems to have been the throne or seat of judgment. There is besides a very high stone towards the northeast or rising sun, and near this a large flat stone encompassed with a mound, which is probably the real altar on which human victims were sometimes sacrificed. There are also two other stones at a considerable distance to the E. and W. and the whole seems to be in the midst of a very extensive circle, marked by an earthen embankment almost effaced by the lapse of years, and affording sufficient space for all the males of the tribe or nation. The largest stones are of silicious sand-stone, but the altar, or rather throne, is calcareous sand-stone.* The smaller stones are of grunstein, or hornblend mixed with felspar. On its first erection the appearance must have been striking, the large stones being of pure white and the smaller black.

After the establishment of christianity the circles of judgment, which had been polluted with human sacrifices and other pagan rites, were abandoned, and the great courts were held on what were called Moot hills or hills of meeting, many of which still exist in the British dominions and in the Netherlands.

The Roman antiquities of England have been repeatedly illustrated. The greatest number of Roman inscriptions, altars, &c. has been found in the north along the great frontier wall which extended from the western sea to the estuary of Tyne. The Roman roads were also striking monuments of their power. A grand trunk, as it may be called, to anticipate the language of our inland navigations, passed from the south to the north, and another to the

* Townson's Tracts, 228.

west, with branches in almost every direction that general convenience and expedition could require. What is called the Watling-street led from Richborough in Kent, the ancient Rutupiæ, N. W. through London to Chester. The Ermin-street passed from London to Lincoln, thence to Carlisle and into Scotland, the name being supposed to be corrupted from *Herman*, which means warrior, as the chief wars lay in the north. The Fosse way is supposed to have led from Bath and the western regions N. E. till it joined the Ermin-street. The last celebrated road was the Ilkenild, or Ikneld, supposed to have extended from near Norwich S. W. into Dorsetshire.*

The Saxon antiquities in England are chiefly edifices, sacred or secular; many churches remain which were altogether or for the most part constructed in the Saxon period, and some are extant of the tenth or perhaps the ninth century. The vaults erected by Grimbald at Oxford in the reign of Alfred, are justly esteemed curious relics of Saxon architecture. Mr. King has ably illustrated the remains of the Saxon castles. The oldest seem to consist of one solitary tower, square or hexagonal: one of the rudest specimens is Coningsburg Castle in Yorkshire; but as that region was subject to the Danes till the middle of the tenth century it is probably Danish. Among the smaller remains of Saxon art may be mentioned the shrines for preserving relics, which some suppose to present the diminutive rudiments of what is styled the Gothic architecture; and the illuminated manuscripts, which often afford curious memorials of the state of manners and knowledge.

The Danish power in England, though of considerable duration in the north, was in the south brief and transitory. The camps of that nation were circular like those of the Belgae and Saxons, while those of Roman armies are known by the square form; and it is believed that the only distinct relics of the Danes are some castles to the north of the Humber and a few stones with Runic inscriptions.

The monuments styled Norman, rather to distinguish their epoch, than from any information that Norman architects were employed, are reputed to commence after the conquest, and to extend to the fourteenth century; when what is called the rich Gothic began to appear, which in the sixteenth century was supplanted by the mixed; and this in its turn yielded to the Grecian. In general the Norman style far exceeds the Saxon in the size of the edifices and the decoration of the parts. The churches become more extensive and lofty, and though the windows retain the circular arch they are larger and more diversified; the circular doors are festooned with more freedom and elegance, and uncouth animals begin to yield to wreaths of leaves and flowers. The solitary keep or tower of the Saxon castle is surrounded with a double wall, inclosing courts or dwellings of large extent, defended by turrets and double ditches, with a separate watch-tower called the Barbican. Among others the cathedrals of Durham

* Gough's Brit. Topog. I. 10.

and Winchester may be mentioned, as venerable monuments of Anglo-Norman architecture, and the castles are numerous and well known. What is called the Gothic or pointed arch is generally supposed to have first appeared in the thirteenth century, and in the next it became universal in religious edifices. The windows diffused to great breadth and loftiness, and divided into branching interstices, enriched with painted glass, the clustering pillars of excessive height spreading into various fret-work on the roof, constitute, with decorations of smaller note, what is called the rich Gothic style, visible in the chapel of King's College, Cambridge, and many other grand specimens in this kingdom. The spire corresponds with the interior, and begins about the thirteenth century to rise boldly from the ancient tower, and diminish from the sight in a gradation of pinnacles and ornaments.

Religion.] The church of England is the only reformed church, which has retained the episcopal form in its ancient splendor; for though bishops may also be found in Denmark, Sweden, Norway, &c. they are rather inspectors of the conduct of the clergy and of the modes of education, than prelates endowed with senatorial rank and dignity. In England, on the contrary, the bishops are peers of parliament, and have the style and importance of nobility. Yet the creed of the English church is rather Calvinistic than Lutheran. But the special tenets of the English church are sufficiently explained in the thirty-nine articles; and a brief idea of its government will be more pertinent to the present purpose.

Upon his dispute with the pontiff, Henry VIII. assumed the title of *supreme head of the national church*. Next in dignity and power are the archbishops of Canterbury and York; the first being styled *Primate of all England*; and the second *Primate of England*. The archbishop of Canterbury precedes all persons, except the royal family; he has the power of probate of all testaments within his province, and of granting several dispensations concerning benefices; he has also four courts of judicature, that of Arches, of Audience, of Prerogative, and of Peculiars. In other respects the archiepiscopal office is rather a dignity than a jurisdiction, and the primates rarely interfere in any dioceses except their own. They are appointed by the king in the same manner as the bishops, by what is called a *Congé d'Elire*, or leave to elect.

Upon any vacancy in an episcopal see, the dean and chapter apply to the king, who returns a *Congé d'Elire* naming the person to be chosen. A chapter of the prebendaries is then summoned by the dean, and they are constrained, under the penalty of a *præmunire*, to elect the person nominated. The solemnity is completed by the royal assent under the great seal, and by the confirmation and consecration performed by the metropolitan or in his name. The prelate afterwards pays homage to the king for his temporalities, or the baronies connected with the see; and compounds for the first fruits, that is, the revenue of the first year, which is paid to the corporation for increasing the benefices of the poor clergy. The omission of consecration is the only difference

when a bishop is translated to another see ; and when an archbishop is nominated, the king appoints four or more bishops to officiate at the confirmation.

The bishop alone may ordain deacons and priests, dedicate churches and burial grounds, and administer confirmation. In former times episcopal jurisdiction extended to the licensing of physicians, surgeons, and schoolmasters, and to the conjunction of small parishes. At present it chiefly embraces questions of births, marriages, deaths, and testaments, and any delinquencies of the clergy ; to which body indeed their attention is now chiefly confined, and they rarely, except in parliament, interfere in secular subjects. The bishop of Sodor and Man has no place in parliament. All the other bishops are barons and peers of the realm by three different claims ; in right of the baronies attached to their sees, as barons summoned by writ, and as barons by patent, a form which accompanies their consecration. Their privileges approach the regal ; they are sole judges in their own courts, and issue writs in their own names, not in the royal style used by other courts. They can depute their authority, which no other judge can ; and their episcopal power of conferring orders, &c. may be exerted in any Christian country, while lay peers are only acknowledged in the country where they derive their dignities. To pass other more minute privileges, the bishop of London, as presiding over the capital, has the precedence of all the others. The see of Durham constitutes a county palatine, with great powers and prerogatives : the authority and patronage of the bishop are of course very extensive, and even the king's judges only sit in his diocese by his permission. The bishop of Winchester is the third in dignity, but esteemed the first in opulence, as the large civil list of Durham, while it adds power, diminishes revenue. These three bishops precede all the rest, who take place according to the seniority of consecration.

To every cathedral in England belong several prebendaries as canons, and a dean, so styled, as is said (*Decanus*) because he anciently presided over ten canons. In the old quaint language he was called one of the bishop's eyes, while the archdeacon who had charge of the deacons was reputed the other. The dean and chapter of prebendaries assist the bishop in ecclesiastic affairs. The prebendaries are so styled from the prebend or *hass præbenda*, a portion of land or income allotted to them ; and, with the dean, form a body, college, or corporation : and they have several privileges superior to the common or minor canons. At the reformation their salaries were mostly converted into money, but those of Durham preferred the ancient portions of land ; which having prodigiously increased in value, they are now styled golden prebends, being worth from 800*l.* to 1200*l.* a year, while the bishop out of 9000*l.* a year has to support a great and unavoidable expenditure.

The next order is that of the arch-deacons, amounting in all to about sixty ; their office is to inspect the moveables of the churches, to reform slight abuses, and to induct into benefices. Arch-

priests, who on the Continent share the labours of the arch-deacon on a smaller scale, being superintendants over a few parishes, were in England also styled rural deans, but are now unknown. Subdivisions of government are so much controlled by the very nature of human affairs, that the power of the arch-priest almost correspond with the Scotish presbytery, while the provincial synods are similar to bishoprics.

Of the clergy in general, the lowest order is that of deacons, whose office formerly was to superintend the poor; the ancient donations to the church being always assigned in three divisions, one to the poor, another for repairs, and the last for the clergy. At present the deacon's office is restricted to baptism, to reading in the church, and assisting the priest at the communion by handing the cup only. Deacon's orders cannot be canonically received before the age of twenty-three years, those of a priest require twenty-four, and a bishop must be thirty. The curate is a clergyman appointed to officiate for another, and is so named from his having the care of souls; hence the French rather apply the term to the rector. If the predial or great tythes of the parish be appropriated, or converted into secular hands, the priest is termed a vicar, a name originally implying that they were the *vicarii*, or deputies of the rector; but if the tythes be entire, the priest is styled rector. The church wardens superintend the repairs and decorations of the church, and the requisites for divine service, and collect the alms of the parishioners; they are annually elected at Easter, and have sometimes sidesmen, a kind of assistants. The sacristan, corruptly called sexton, originally had the care of the furniture and plate of the church; and by a still greater corruption the appellation is now applied to the grave-digger, when it ought to have been conferred on the parish-clerk.

The clergy in general enjoy some peculiar privileges. Their goods are free from tolls in fairs and markets: they cannot be compelled to any office civil or military: they are only amerced according to their temporal estate: nor are they assessed for a robbery committed in the hundred, or for watching, warding, highways, &c. &c.

Ecclesiastical courts still retain considerable power: the convocation, consisting of the archbishops and bishops, with a lower house of 150 members, only meets for the sake of form; but have not been allowed to deliberate since the reign of Anne.

Next in dignity is the court of delegates, acting by a special commission under the great seal; and to whom an appeal lies from the highest metropolitan court. The court of arches is so styled because it was held in the arches of the church of St. Mary-le-bone, London, but now in the great hall, Doctors Commons; only doctors of the civil law are allowed to plead. The court of audience is always presided by the archbishop himself, who decides any doubts concerning the admission to benefices and dispensation of the banns of matrimony.

The next court is that of prerogative, which judges of estates fallen by will, or intestate; the prerogative office is likewise in Doctors Commons. The court of peculiars refers to several pe-

cular parishes exempt from the jurisdiction of the bishops, but here amenable: the judges are sole and without jury.

The ecclesiastical geography of England may be seen in the following table:

Province of Canterbury.

1. Bishopric of London, containing Essex, Middlesex, and part of Hertford.
2. Winchester.—Surry, Hampshire, Isles of Wight, Jersey, Guernsey, and Alderney.
3. Litchfield and Coventry.—Stafford, Derby, and part of Warwick and shropshire.
4. Lincoln.—Lincoln, Leicester, Huntingdon, Bedford, Buckingham and part of Hertford.
5. Ely.—Cambridgeshire.
6. Salisbury.—Wilts and Berkshire.
7. Exeter.—Cornwall and Devon.
8. Bath and Wells.—Somersetshire.
9. Chichester.—Sussex.
10. Norwich.—Norfolk, Suffolk and a small part of Cambridge.
11. Worcester.—Worcester, and part of Warwick.
12. Hereford.—Hereford and part of Shropshire.
13. Rochester.—Part of Kent.
14. Oxford.—Oxfordshire.
15. Peterborough.—Northampton and Rutland.
16. Gloucester.—Gloucestershire.
17. Bristol.—The city of Bristol, part of Gloucestershire, and county of Dorset.
18. Llandaff.—Glamorgan, Monmouth, Brecknock, and Radnor.
19. St. David's.—Pembroke, Cardigan, and Caermarthen.
20. St. Asaph.—The greatest part of Flint, Denbigh, and Montgomery, and some part of Shropshire.
21. Bangor.—The counties of Anglesey, Caernarvon, Merioneth, and part of Denbigh and Montgomery.

Province of York.

22. Durham.—Durham and Northumberland.
23. Carlisle.—Great part of Cumberland and Westmoreland.
24. Chester.—Cheshire, Lancashire, Richmondshire (which is part of York;) with part of Cumberland and Westmoreland.
25. Isle of Man.

Those who differ in tenets or forms from the established church may, in general, be styled dissenters, though the term be more strictly applied to the Presbyterians and Independents. The other principal classes of the dissidents are the Papists, Methodists, Quakers, the Anabaptists, the Swedenborgians, and the Unitarians; the last class denying the Trinity, and believing only in one God, is now intermingled with the two first, and in considerable numbers with the established church. The Independents assert, that each congregation has a right to regulate itself, while the Presbyterians unite churches under various divisions, provincial and national. The Papists used chiefly to abound in Lancashire, Staffordshire, and Sussex; they had potent chiefs, and were a formi-

dable body; but the passage from superstition to contempt is so natural, that many have fled to the opposite extreme. Those who retain their faith generally display moderation, which has been naturally increased by the late privileges extended to them.

The Methodists are numerous and respectable. Their numbers in Great Britain in July 1809 amounted to 132,086; in Ireland to 25,835: total 157,921. In July 1810 they had increased in both islands 7,777. In the other British dominions they were in 1809 in Gibraltar 40, in the west Indies 12,500, British North America 1,121. These added to the Methodists of the United States, 159,500 in number, makes a total of 331,082 Methodists then on the globe. They allow the propriety of the creed and government of the Church of England; but require a more strict life, more fervent devotion, and more frequent and serious attendance upon divine worship, than is enforced by the establishment. A philosopher may well envy the mild creed and universal charity of the Quakers; while we must allow with a sigh that a nation of quakers could not exist, except all nations were of the same persuasion. The Anabaptists disown infant baptism, and bathe the adult disciple. The learned Whiston admired their tenets and their practice of anointing the sick with oil, which, as he believed, operated with miraculous power. The Swedenborgians derive their name from the Baron Swedenborg, a nobleman, who exchanged his native country of Sweden for a residence in England.

Government.] The English constitution is a limited monarchy, counterpoised by two senates, one of hereditary peers, the other of representatives chosen by the people.

The King of England at his coronation solemnly swears to govern his people according to parliamentary statutes, and the law of the country; to maintain the Protestant religion; and to preserve the legal rights and privileges of the bishops, clergy, and church.

His acknowledged prerogatives are chiefly to declare war and to make peace, a power upon which the whole of public prosperity may be said to depend; to form alliances and treaties; to grant commission for levying men and arms; and even for pressing mariners. To the king belong all magazines, ammunition, castles, forts, ports, havens, and ships of war: he has also the special management of the coinage, and determines the alloy, weight, and value. His prerogative likewise extends to the assembling, adjournment, prorogation, and dissolution of parliament, and to its removal to any place. He also enjoys the nomination of all officers on sea or land; of all magistrates, counsellors, and officers of state; of all bishops and other great ecclesiastical dignitaries; and is not only the fountain of honour but of justice, as he may pardon any offence, or mitigate the penalty. As head of the church he may call a national or provincial synod, and with its consent enact canons either relating to faith or practice. The other prerogatives are more minute and more adapted to juris-prudential enumeration. The more important exceptions are, that he cannot enact new laws or impose new taxes without the consent of both houses of parliament.

This grand national council claims the next consideration. Originally both the nobles and the commons met in one house, and it is not impossible that the mere inconvenience of not finding halls large enough for the ambulatory parliaments might have occasioned the division into two houses, unknown in any other country, and which in fact may be regarded as the sole foundation of English liberty. The house of Peers may be said to have existed from the earliest period of English history; but concerning the origin of the Commons there is a dispute between the Tory and Whig writers. The present constitution of the parliament of England may however be traced with certainty to near the middle of the thirteenth century; but it remains unknown at what precise time happened the important separation of the Commons from the Peers. The latter are hereditary senators in their several degrees of duke, marquis, earl, viscount, and baron. The Duke is so styled from the Latin *dux*, a leader or general; the title of Marquis springs from the Gothic language, and implies the commander of a march or frontier: the Earl and Baron are also from the Gothic, and merely imply eminent men; the Viscount is Latin, and signifies the lieutenant of the count or earl. The various orders of nobility have been preserved more pure in England than in any other country; owing partly to the laws of primogeniture, partly to their senatorial office, partly to the institution of the college of heralds. In Germany and some other countries the nobility has fallen into comparative degradation, from the extension of the title to all the sons, and from the presumption of adventurers. The privileges of the peers are moderate and univindious, there being no exemption from taxes, &c. as in some countries.

The House of Commons consists of knights, citizens, and burgesses, chosen by counties, cities, and burghs, in consequence of royal writs directed to the sheriff. The members have certain privileges, as exemption from arrest in civil causes, on their journey to parliament, during their attendance, and on their return; nor can they be questioned out of the house, for any sentiment there uttered. The commons form the grand inquest of the realm, and may impeach or accuse the greatest peers; but their chief privilege, and upon which their whole power depends, is the levying of money, in which they are deservedly so jealous, that they will not permit the smallest alteration in a money bill. Since the union with Ireland the House of Commons consists of six hundred and fifty-eight members; but by sickness, important offices, and indispensable avocations, there rarely appear above two thirds of the number. A Speaker or president is chosen at the meeting of every new parliament, but is usually continued from one to another, as the office requires a complete and ready knowledge of the forms, and considerable abilities.

Acts of parliament are first presented in the form of *bills*, and, after having gone through various and exact forms generally observed with great minuteness, become law on receiving the sanction of the Crown.

Adjournments may frequently happen in one session, and the

business is continued and resumed; but a prorogation terminates the session, and the bills not then passed must recommence their whole progress. By a modern statute the death of the king does not, as formerly, terminate the parliament; which, on the contrary, had it been previously dissolved, may, on that event, resume its functions.

Such are the three grand component parts of the English constitution; but perhaps its most beneficial and popular effects arise from the mode of administering justice, and other ramifications. For the sake of connection, however, it is proper first to consider the Privy Council and the other divisions of the government.

The Privy Council formerly possessed great power, but at present is chiefly employed in deliberations on affairs of sudden emergence, on peace and war, and special provinces of the royal prerogative. The members are chosen by the king, and on changes of administration are seldom erased, though those in opposition never attend. They are styled Right Honourable, and are sworn to observe secrecy: the lowest at the board pronounces his opinion first, and the king, if present, concludes with declaring his judgment.

Even at an early period, when the monarch maintained in his own hands a great share of the administration of justice, and of the actual exercise of authority, there were intervals of absence or recreation in which he delegated the chief management of business to some select person, usually an ecclesiastic, whose cultivated talents qualified him for such an important trust. To lend more weight to this substitute, he was commonly appointed chancellor or chief administrator of civil justice, was president of the House of Peers, and supported the royal influence in that great assembly. But in later times when the management of the House of Commons became the chief object of the crown, the chancellor of the Court of Exchequer, as superintendant of the public revenue, is the officer generally considered as prime minister. The distribution of fifty millions a year, joined with the royal support, has recently carried his power to the highest elevation. Next to him in authority are the secretaries of state, who are followed by the chancellor, the treasurer of the navy, the president of the council, the paymaster of the forces, the commissioners of the treasury, and other persons of high trust.*

Judicature.] The judicature of England is worthy of the highest applause with regard to precision and purity; and bribes, so frequent in other countries, being totally unknown, the saving of this expense must be candidly poised against other legal disbursements. The trial by jury is another glorious feature of English jurisprudence, handed down from the Saxon times, and is justly respected as the very safeguard of the lives, liberties, and properties of the nation. It would be idle and extraneous here to attempt even a brief sketch of the laws of England.

* We subjoin here a list of English kings, from the time that this country became united under one monarch, in the person of Egbert, who subdued the other princes of the Saxon heptarchy, and gave the name of Angle-land to this part of the island; the

Among the courts of law the next in dignity to the House of Lords is the Court of King's Bench so called, because the sovereign was understood to judge in person; and its jurisdiction of course extends to the whole kingdom, the presiding judge being denominated Lord Chief Justice of England. The Court of Chancery judges causes in equity to moderate the rigor of the law, and defend the helpless from oppression, and especially to extend

Saxons and Angles having about four centuries before, invaded and subdued the ancient Britons, whom they drove into Wales and Cornwall.

Began to reign.		
800 Egbert		
838 Ethelwolf		
857 Ethelbald		
860 Ethelbert		
866 Ethelred		
871 Alfred the Great		
901 Edward the Elder		
925 Athelstan		
941 Edmund		
646 Edred		
955 Edwy		
959 Edgar		
975 Edward the Martyr		
978 Ethelred II.		
1016 Edmund II. or Ironside		
1017 Canute, King of Denmark		
1035 Harold		
1039 Hardicanute		
1041 Edward the Confessor		
1065 Harold		
1066 William I.	{	Saxon Princes.
	(Commonly called the conqueror) duke of Normandy, a province facing the S. of England, now annexed to the French monarchy.	
1087 William II.	{	Sons of the Conqueror.
1100 Henry I.	{	
1135 Stephen, grandson to the Conqueror, by his 4th daughter Adela.		
1154 Henry II.	{	(Platagenet) grandson of Henry I. by his daughter, the empress Matilda, and her 2d husband, Geoffrey Platagenet.
1189 Richard I.	{	Sons of Henry II.
1199 John	{	
1216 Henry III. son of John.		
1272 Edward I. son of Henry III.		
1307 Edward II. son of Edward I.		
1327 Edward III. son of Edward II.		
1377 Richard II. grandson of Edward III. by his eldest son, the Black Prince.		
1399 Henry IV.	{	Son to John of Gaunt, duke of Lancaster, 4th son to Edward III.
	{	
1413 Henry V. son of Henry IV.	{	
1422 Henry VI. son of Henry V.	{	
1461 Edward IV. descended from Edward III by Lionel his 3d son.		
1483 Edward V. son of Edward IV.		
1483 Richard III. brother of Edward IV.		
1485 Henry VII.	{	(Tudor) son of the countess of Richmond, of the house of Lancaster.
	{	
1509 Henry VIII. son of Henry VII.		
1547 Edward VI. son of Henry VIII.		
1553 Mary	{	
1558 Elizabeth	{	Daughters of Henry VIII.
1603 James. I.	{	Great grandson of James IV. king of Scotland, by Margaret, daughter of Henry VII. and first of the Stuart family in England.
1625 Charles I. son of James I.		
Commonwealth and protectorate of Cromwell.		
1649 Charles II.	{	Sons of Charles I.
1685 James II.	{	

relief in three cases, accident, fraud, and breach of trust. The Court of Common Pleas determines, as the name imports, the common suits between subject and subject, and tries all civil causes, real, personal, or mingled, according to the precise precepts of the law. The Court of Exchequer, so termed from the ancient mode of accounting upon a chequered board, decides all causes relating to the royal treasury or revenue. There is also a court for the duchy of Lancaster, having cognizance of the revenues of that duchy annexed to the crown by Henry IV.

The judges perform their circuits in the spring and autumn, and in the mean while more minute cases are determined by the justices of the peace, who may be traced to the fourth year of Edward III. Every three months the justices of the county meet at what is called the quarter sessions, and the grand inquest or jury of the county is here summoned, which inquires concerning crimes, and orders the guilty to jail till the next circuit or assizes. The office of the sheriff is to execute the royal mandates, to impannel juries, to bring persons for trial, and to see the sentences executed; to collect fines and remit them to the exchequer, and to preserve the tranquillity of the shire.

There was formerly a bailiff in every hundred, but the office is now rare. The constables personally assist in the preservation of the peace, and execute the warrants of the justices. The coroner inquires by a jury of neighbours into cases of violent death. The clerk of the market superintends the weights and measures; and it were to be wished, for the benefit of the poor, that the office were multiplied and strictly enforced.

Such are the chief magistrates and officers in the country. Cities and towns are generally ruled by a mayor and alderman, or by similar magistrates under different appellations, whose juridical power little exceeds that of justices of the peace.

To enumerate the various punishments inflicted by the laws of England would be an unnecessary task. It has been justly observed, that they are too sanguinary, and that their frequency diminishes the intended purpose of impressing terror. If death were only inflicted in cases of murder, the relaxation would be found beneficial to the community. It would certainly be preferable

Began to reign.

1688	William III. nephew and son-in-law of James II.
1702 Anne	Daughters of James II. in whom ended the Protestant line of Charles I. for James II. upon his abdicating the throne, carried with him his infant son, (the late Pretender) who was excluded by act of parliament, which settled the succession in the next Protestant heirs of James I. The surviving issue of James, at the time of his death, were a son and a daughter, viz. Charles, who succeeded him, and the princess Elizabeth, who married the Elector Palatine, who took the title of king of Bohemia, and left a daughter, the princess Sophia, who married the duke of Brunswick Lunenburgh, by whom she had George, elector of Hanover, who ascended the throne, by act of parliament, expressly made in favor of his mother.
1714 George I.	
1727 George II. son of George I.	
1760 George III. grandson of George II.	{ House of Hanover.

ENGLAND.

to send *other* criminals to the new and distant Asiatic settlements, than by the waste of blood, to lessen strength and population.

Population.] According to a census taken in 1801, there were
In ENGLAND, Males 3,987,935
 Females 4,343,409

In WALES, Males 257,178
 Females 284,368

The Army 198,351
Navy 126,279
Seamen 144,558
Convicts 1,410

Total Males 4,716,045
Total Females 4,627,443

In Cities 2,356,793
In the Country 6,516,197
Army, Navy, &c. 470,598

Farmers 1,713,289
Mechanics and }
Manufacturers 1,843,351

Houses in ENGLAND.
— 1,467,870 inhabited.
— 53,965 uninhabited.

— Total 1,521,835
Families 1,778,420
— 108,053 inhabited houses.
— 3,511 uninhabited do.

— Families 118,503
Total houses inhabited 1,575,923
Total houses uninhabited 57,476

Total families 1,886,923

The population of Ireland is estimated at about 4,000,000
That of Scotland, at 1,607,760
The population of England and Wales 9,343,488

Total inhabitants in Great Britain 14,951,248

The English language is probably diffused to the extent of 20,000,000 of people.

Army.] The British army, in 1808, consisted,

1. Of *Regular Troops*, as follows, viz.

Infantry	101,003	{	128,422
Swiss do.	19,561		
German do.	7,858		
Cavalry	22,653	{	25,714
Swiss do.	172		
German do.	2,989		
Guards	8,090		
Garrisons	6,757		
Veterans	5,624		
Armee Depots	3,899		
Artillery	24,781		
Total	203,287		

2. Of *Militia*.

In Great Britain	54,686
Ireland	21,473

Total Militia	76,159
Total Regulars	203,287

Whole No. 279,446

The British forces in the East Indies, in 1809 242,000

Total 521,446

Navy.] The great rampart, defence, and glory of Great Britain consist in her navy, in size, strength, and number of ships, far exceeding any examples on record, as may be judged from the following catalogue formed in February 1811.

NAVY LIST, February 1811.

Statement of the British Naval Force, exclusive of the hired armed Vessels, which are chiefly employed in protecting the Coasting Trade of Great Britain.

	Line.	Fifties.	Frigates.	Sloops.	Brigs.	Cutters.	Schra.	Bombs.	Total.
At sea	-	89	9	125	100	140	32	53	553
In port and fitting	-	31	6	37	47	33	7	22	183
Guard, hospital, and prison ships	{	35	6	6	5		1		53
In ordinary and repairing	{	64	11	98	44	17		4	246
Building	-	35	2	14	3				54
Total		254	34	280	199	190	49	79	13 1089

For this immense fleet the number of seamen amounts from 100 to 120,000, a number which no other country ancient or modern could have supplied.

The naval power of Great Britain constitutes so striking and important a feature in the national portrait, that it merits particular illustration. Even in the Saxon times we find considerable fleets mentioned of the small vessels then in use. One of the Northumbrian monarchs assembled a numerous fleet near Jarro, the monastery of Beda, in an extensive haven of the time, now become a salt marsh. About the year 882 we find that Alfred directed a powerful fleet against the Danish invaders. The fleet of Edgar is also celebrated, but the armament of Ethelred the second, in the year 1009, exceeded any which England ever before had beheld, probably amounting to five hundred of the small ships then known. But the devastations of the Danes and Normans occasioned such a decline in the naval power of England, that Richard I. was obliged to have recourse to foreign vessels for his crusade. In the reign of John we, for the first time, find commemorated a signal victory of the English and Flemings over the French fleet of Philip Augustus, which was computed at 1700 ships, or rather boats. The English monarch, in the pride of his triumph, was the first who ordered the SALUTE to be paid by foreign vessels to the national flag. The fleet of England thenceforth continued to be always respectable, and generally victorious; but the preponderance of the English armaments over those of France only became permanent and decisive a little more than a century ago, after the battle of La Hogue. Spain had yielded the contest since the destruction of her great Armada, and Holland had been greatly reduced in her naval conflicts under Charles the II. so that no rival remains, and Great Britain maintains a fixed superiority over the ocean.

The special superintendance of the navy is committed to the Board of Admiralty, composed of admirals of known skill, and of peers whose impartiality generally regards merit alone in this important service. The recent conduct of English maritime war has been crowned with distinguished success; and their admirals must be allowed to rival any names in naval history ancient or modern.

Revenue.] In ancient times the royal revenue chiefly arose from the domains, or lands appropriated to the crown; from amerciaments civil and criminal, which passed to the fisc or treasury, and from customs on goods imported and exported. As in war each soldier was obliged to maintain himself for a certain time, the expenditure was not much increased. Upon extraordinary emergencies, it appears that a contribution was raised by the consent of the national council. In later periods subsidies were granted to the amount of a fifteenth or a tenth of landed income, and a proportional rate on moveable goods. As society advanced, taxes began to be imposed on the materials themselves; and from a small plant an enormous tree has risen, with a labyrinth of roots, which in the opinion of some politicians undermine the island,

while others believe that they only produce a more firm consolidation.

The *excise* forms one of the most productive branches of the revenue. Next stand the *customs*, and after them the *stamps*. The land-tax has recently been rendered perpetual and sold to proprietors of estates and other individuals. But, instead of the land-tax, now appear those on sugar, tobacco, and malt, amounting to near 3,000,000. The other supplies arise from the East India Company, lotteries, &c. The following is the produce of the excise, customs, and stamps, in 1806 and 1808.

	1806.	1808.
Excise	£ 25,338,925	£ 26,769,013
Customs	12,769,243	12,337,315
Stamps	4,568,690	4,969,424

The net revenue of Great Britain amounted

In 1806	to	£ 56,902,099
1808	" " "	60,354,782
1809	" " "	58,636,178

The amount of the revenue, for the year ending January 1810 was as follows :

Ordinary	£ 38,339,493
Extraordinary resources	23,790,289
Loans	14,675,668
Grand Total	£ 76,805,450

The amount of expenditure for the same year, was £ 82,027,288. Of this sum £ 20,956,052 was for interest on the national debt; £ 10,904,450, interest on debt redeemed and sinking fund, applied to the reduction of national debt. For the navy £ 9,791,408. For the army £ 18,463,094.

Of the permanent taxes the greater part is employed in discharging the interest of the national debt, which after the American war amounted to more than 239,000,000, while the interest exceeded 9,000,000. At present the national debt is about 480,000,000, and the interest about 19,000,000.

To alleviate this growing burthen, a sinking fund was instituted in 1786, by which between 20 and 30,000,000 may be considered as already redeemed. The national debt began in the reign of William, and grew into what are called the funds or stocks, only synonymous terms for the public debt.

The civil list, from which are defrayed the salaries of officers of state, judges, ambassadors, &c. together with the expences of the royal family, amounts to 1,000,000 annually.

[*Political Importance and Relations.*] With such a prodigious command of national treasure, the political importance and relations of Great Britain may be said to be diffused over the world; for wherever money influences man, there may her power be perceived. The union of Scotland with England delivered the latter

country from the perpetual check, exercised by politicians ancient and modern, of exciting an enemy from behind, and thereby dividing the power of an antagonist. That with Ireland, if preserved by wise and lenient measures, must also impart additional energy. The most important political considerations are those between Great Britain and France. If this country must not be styled the natural enemy of Great Britain, she has yet for many centuries been a constant and jealous rival, eagerly embracing every opportunity to lessen British prosperity and power. Such being the case, it has been regarded as the political interest of England to balance and divide the enmity of France by a strict alliance with some powerful state. Since the revolution in that country many coalitions have been formed on the continent to curb her wild ambition; but they have been, in every instance, ultimately unsuccessful. At present, there is no power but Russia whose enmity could be dreaded, and Russia is too remote, and too sluggish in her movements, to find her enemy unprepared.

The present connections of England with Spain and Portugal are alike honorable to her generosity and her valor. No expense of money or of blood has been spared to relieve those nations from an enemy unrivalled in cruelty and profligacy.

Manners and Customs.] The consideration of national manners may be conveniently referred to three divisions; first, diet; secondly, houses and dress; thirdly, amusements.

The English are generally thought to be excessive in the use of animal food; but since the introduction of potatoes and other esculent vegetables, this position may be doubted. Their fondness for heavy malt liquor deservedly strike foreigners, as a singularity in English diet. They pride themselves in the variety and richness of their *ales*; especially their Burton, Dorchester, and Taunton ales. But the most peculiar malt beverage is *porter*, which ought to be solely composed of brown or high dried malt, hops, liquorice, and sugar; but it is sometimes debased by other ingredients: that of London is particularly famous, and is an article of exportation, being esteemed a luxury on the banks of the Delaware and the Ganges. The prodigious consumption of *tea* is another peculiar feature, the use of that plant being rare in other European countries. The baneful effects of excess in *spirituous liquors* may be traced in the ruined health and morals of the people.

The simplicity of the English cookery strikes foreigners as much as that of the dress, which even among the great is very plain, except on the days of court gala.

The houses in England are peculiarly commodious, neat, and cleanly; and domestic architecture seems here to have arrived at its greatest perfection.

The amusements of the theatre and of the field, and various games of skill or chance, are common to most nations. The baiting of bulls and bears is, it is believed, nearly discontinued: one of the most peculiar amusements of the common people is, the ringing of long peals, with many changes, which

Jeafen those who are so unhappy as to live in the neighborhood of the church.

Prior to the middle of the sixteenth century, the English and French were regarded as barbarous nations by the more polished Italians. The reign and female blandishments of the court of Elizabeth seem to have had a wonderful effect in civilizing the manners. The transition has been well portrayed by an ancient writer, whose simple language, given in modern orthography, may perhaps amuse the reader.

" There are old men yet dwelling in the village where I remain, who have noted three things that are marvellously altered in England within their sound remembrance. One is the multitude of chimneys lately erected : whereas in their young days there were not above two or three, if so many, in many uplandish towns of the realm, (the religious houses, and manor places of their lords, always excepted, and peradventure some great personages,) but each one made his fire against a *rere dosse* in the hall, where he dined and dressed his meat. The second is the great amendment of lodging ; for, said they, our fathers, and we ourselves, have laid full oft upon straw pallets, covered only with a sheet, under coverlets made of *dagswain* or *hofharlots* (I use their own terms) and a good round log under their heads, instead of a bolster. If it were so that our fathers, or the good man of the house, had a mattress or flock bed, and thereto a sack of chaff to rest his head upon, he thought himself to be as well lodged as the lord of the town, so well were they contented. Pillows, said they, were thought meet only for women in childbed. As for servants, if they had any sheet above them it was well, for seldom had they any under their bodies, to keep them from the pricking straws that ran through the canvass, and razed their hardened hides.

" The third thing they tell us of, is the exchange of wooden platters into pewter, and wooden spoons into silver or tin. For so common were all sorts of wooden vessels, in old time, that a man should hardly find four pieces of pewter (of which one was peradventure a salt-seller,) in a good farmer's house ; and yet, for all this frugality, if it may be so justly called, they were scarce able to live and pay their rents at their days, without selling of a cow, or a horse, or mare, although they paid but four pounds at the uttermost, by the year. Such was also their poverty, that if a farmer, or husbandman, had been at the alehouse, a thing greatly used in those days, amongst six or seven of his neighbors, and there, in a bravery, to shew what store he had, did cast down his purse, and therein a noble, or six shillings in silver, unto them, it is very likely that all the rest would not lay down so much against it ; whereas, in my time, although peradventure four pounds of old rent be improved to forty or fifty pounds, yet will the farmer think his gains very small, toward the midst of his term, if he have not six or seven years rent lying by him, therewith to purchase a new lease ; besides a fair garnish of pewter on his cupboard, three or four feather beds, as many coverlids, and carpets of tapestry, a silver salt-seller, a bowl for wine, if not a

whole nest, and a dozen of spoons to furnish up the suit. This also he taketh to be his own clear; for what stock of money soever he gathereth in all his years, it is often seen that the landlord will take such order with him for the same, when he reneweth the lease, (which is commonly eight or ten years before it be expired, since it is now grown almost a custom, that if he come not to his lord so long before, another shall step in for a reversion, and so defeat him outright,) that it shall never trouble him more than the hair of his beard, when the barber hath washed and shaven it from his chin.”*

The cold restraint, which some foreigners have ascribed to the English, has been candidly judged by a recent traveller, to exist only in appearance. A more genuine attribute of the English is integrity, which has carried their credit and commerce to an extent before unknown in the history of nations.

Language.] Most European languages are derived from the Gothic or the Latin. To the Latin origin belong Italian, French, and Spanish; to the Gothic, the German, Dutch, Flemish, Danish, Swedish, and Norwegian. From the situation of the country, and other causes, the English participates of both those grand sources; and unites in some degree the force of the Gothic with the melody of the Latin dialects. The ancient ground, and native expression, originate from the Gothic divisions of the Belgic, Saxon, and Danish; but particularly from the Belgic, as will appear from comparison with the Dutch and Frisic. The languages of Latin origin have, however, supplied a vast wealth of words, sometimes necessary, sometimes only adopted because they are more sonorous, though not so emphatic as the original Gothic. There is no evidence of the existence of Celtic words in the English language,† whatever some antiquaries have imagined, for the words they indicate may also be found in Iceland, a country never peopled by the Celts.†

Numerous manuscripts exist, written in the Anglo-Saxon or old English language, and one of its most classic authors is the great Alfred himself. It appears from many works, written long after the Conquest, that the French language, though colloquial among the great, scarcely imparted any tinge to the national tongue. The conquests of Edward III. in France, and other circumstances effected, in the fourteenth century, a change in vain attempted by the Norman conqueror. Chaucer, who wrote at that period, presents almost the first rude dawn of what may be termed the English language. In the same century, that enterprising traveller Sir John Mandervile supplies one of the best specimens of English prose.

In the succeeding century, the speech had made such rapid advances, that even as early as the reign of Edward the Sixth, we find it vary very little from that of the reign of Henry the Eighth. The works of Fortescue in the reign of Edward the Fourth, set-

* Description of Britain, in Hollinshed's Chronicle, vol. 1. fol. 85.

† Both these positions have been doubted.

ting aside the orthography, might even be perused by the common reader.

In the reign of queen Elizabeth, a century after, the English language had acquired such copiousness, dignity, force, and melody, that perhaps in the eye of very distant posterity, moderns may be supposed never to have exceeded, what is gained in elegance being generally lost in power. Sidney's defence of poesy may be regarded as a good specimen of English prose, not to mention Hooker's ecclesiastical polity, and other large works of that period, which continue to be read and admired.

The common translation of the bible is a noble specimen of the dignified prose of the following reign, beyond which it is unnecessary to conduct this sketch, as our libraries abound with the succeeding publications.

The construction of the English language is peculiar, and renders the study of it very difficult to foreigners. The German and other Gothic dialects present declensions of nouns, and other correspondencies with the Latin, while in the English all such objects are accomplished by prefixes. Anomalies also abound, and are too deeply rooted, ever to be eradicated by grammatical rules. Farther remarks would be foreign to the plan of this work, which however requires, occasionally, short specimens of the various languages of the globe, to enable the reader to judge of the relative origins of nations : for this purpose the Lord's prayer is generally chosen, which shall be here given in Anglo-Saxon and modern English.

Uren faderthic arth in heofnas. Sie gehalgud thin noma. To cymeth thin ryc. Sie thin willa, sue is in heofnas and in eorth. Uren hlaf oferwistlic sel us to daeg. And forgeve us scylda urna sue we forgefau scyldgum urum. And no inlead usig in custnung. Ah gefrig usich frim ifle. Amen.

Our father, which art in heaven, hallowed be thy name ; thy kingdom come ; thy will be done on earth as it is in heaven ; give us this day our daily bread, and forgive us our debts as we forgive our debtors ; and lead us not into temptation, but deliver us from evil. Amen.

Literature.] English literature is a vast and inviting field ; but a few fugitive remarks must here suffice. Of the traditional verses of the Druids, a few relics still exist ; but the Roman conquest does not appear to have inculcated letters with much diffusion, for no author of those periods claims a British origin. The country was seized by the Saxons, before British literature faintly dawned in Gildas, A. D. 560. Irish literature commenced about the same period, and continued for some centuries to supply numerous writers in the Latin language ; while England remained almost destitute. But Beda in the eighth century redeemed this defect, in himself a host, and, like Chaucer, the wonder of his time. The Danish invasions were ruinous to literature, both in Great Britain and Ireland, and the great Alfred was obliged to exert his utmost endeavors in order to restore some degree of learning even among the clergy. That admirable prince himself translated

some works of merit and utility, as the histories of Orosius and Beda into the Anglo-Saxon. Of the interval between the age of Beda and the year 1100, the Saxon chronicle is a noble but neglected monument, being the only civil history of England, for a space of 400 years. About the year 1100, English literature commenced a firm and steady pace; a numerous train of historians, poets, and other writers, fills the pages of biography. In the fourteenth century, Roger Bacon aspires even to the praise of eminent genius. In the following century, the civil wars between the houses of York and Lancaster were destructive of literature and the arts; nor will it be easy to name an illustrious author of that period, though the introduction of printing in the reign of Edward the Fourth forms a memorable epoch. The writers of the sixteenth and following centuries are numerous and well known. The grand feature of English literature is original genius, transmitted even from Roger Bacon to Shakespeare, Lord Bacon, Milton, Newton, Locke, and Berkeley; not to dwell here on claims more minute, but equally firm. In scientific departments, England does not yield even to France. In the various branches of mathematical knowledge she has surpassed all nations. The English clergy have always cultivated classical literature with distinguished zeal and predilection.

Arts.] The present state of the arts in England is worthy of so opulent and refined a country, and the progress has been rapid beyond example. Some faint traces of painting occur in the thirteenth century; but the names and country of the artists do not appear, except that of William of Florence, where the art had faintly begun to revive. In the reign of Edward I. the magnificent castles built in Wales attest the genius and skill of the architects, while their individual fame is lost in obscurity: and towards the end of the fourteenth century, rich monuments of architecture and sculpture are interspersed with some few remains of painting. But England continued, till the last century, to import her chief painters from abroad; as Holbein, Antonio More, Zucchero, Jansen, Mytens, Rubens, Vandyke, Lely, Kneller, &c. &c. Yet in miniature and engraving, there were excellent native artists in the 17th century, and an eminent native architect, Inigo Jones. In the beginning of the 18th century, even the noble architecture of St. Paul's did not redeem the other arts from great decline, till Hogarth instituted examples of ethic and characteristic painting, which have deservedly excited the admiration of Europe. The present reign has not only been distinguished by patronage of the arts, but in exuberance of artists of deserved reputation. In painting, engraving, architecture, and sculpture, England may now boast of many distinguished native names: but in music she still acknowledges the superior skill of the Germans and Italians.

Education.] The education of the lower classes in England had become extremely neglected, before the benevolent institution of the Sunday schools. There can be no doubt that where the common people are the best instructed, there they will be found the most quiet, contented, and virtuous; as they feel a conscious self-re-

spect, are accustomed to be treated with regard by each other, and will cheerfully extend the same reverential conduct towards their superiors in the favours of fortune; and a practical estimate of the advantages of general education, may be formed by comparing the neglected peasantry of Ireland, with the peaceable Highlanders of Scotland, where public schools exist in every parish. The middle and higher ranks of English spare no expence in the education of their sons, by private tutors at home, or at what are called day schools and boarding schools. The most eminent public schools are, those of St. Paul's, Westminster, Eton, and Winchester; and from them have arisen some of the most distinguished ornaments of their country. The scholars in due time proceed to the universities of Oxford and Cambridge; foundations, of an extent and grandeur that impress veneration. The number and æra of the colleges, will appear from the following list.

University of Oxford.

- 1263. **Baliol College**—Founder, John Baliol (father of John, king of Scotland,) and his wife, Dervorgilla, countess of Galloway.
- 1276. **Merton College**—Walter Merton, bishop of Rochester.
- 1292. **University College**—William, archdeacon of Durham.*
- 1316. **Exeter College**—Walter Stapleton, bishop of Exeter.
- 1323. **Auriell College**—Adam de Brome, almoner to Edward II.
- 1340. **Queen's College**—Robert Eglesfield, chaplain to queen Philippa.
- 1379. **New College**—William of Wickham.
- 1348. **All-souls**—Archbishop Chicheley.
- 1458. **Magdalen College**—William of Wainflet.
- 1613. **Brazen nose**—William Smith, bishop of Lincoln.
- 1516. **Corpus Christi**—Richard Fox, bishop of Winchester.
- 1539. **Christ's Church**—Wolsey and Henry VIII.
- 1556. **Trinity College**—Sir Thomas Pope.
- 1557. **St. John's**—Sir Thomas White.
- 1571. **Jesus College**—Dr. Price.
- 1613. **Wadham**—Nicholas Wadham, Esq.
- 1624. **Pembroke**—Thomas Tesdale, Esq. †

University of Cambridge.

- 1284. **Peter-house**—Hugh Balsham, bishop of Ely.
- 1340. **Clare-hall**—Elizabeth de Burg, countess of Ulster.
- 1347. **Pembroke-hall**—Mary de Valentia, countess of Pembroke.
- 1348. and 1557. **Gonvill and Caius**—The Doctors so named.
- 1353. **Trinity-hall**—William Bateman, bishop of Norwich.
- 1356. **Bennet or Corpus Christi**—Henry duke of Lancaster.
- 1443. **King's College**—Henry VI.
- 1446. **Queen's College**—Margaret of Anjou.
- 1474. **Catharine-hall**—Dr. Woodlark.
- 1497. **Jesus College**—John Alcock, bishop of Ely.
- 1516. **Christ's College** } Margaret, countess of Richmond, mother
1511. **St. Sohn's** } of Henry VII.

* Gough's Camd. I. p. 302, &c.

† Ibid.

1520. Magdalen College—Thomas, lord Audley.
 1546. Trinity College—Henry VIII.
 1589. Emanuel—Sir Walter Mildmay.
 1588. Sydney College—Frances Sydney, countess of Sussex.*

Of the two universities, many minute descriptions have appeared. Oxford is the more majestic; from the grandeur of the colleges and other public buildings, and the superior regularity and neatness of the streets: but the chapel of King's college at Cambridge, is supposed to excel any single edifice of the other university. Both of those magnificent seminaries impress every feeling mind with reverential awe; not only by their architectural dignity, but by a thousand collateral ideas of ancient greatness and science.

Cities and Towns.] In giving a brief account of the chief cities and towns in England, a few of the most important shall be arranged according to dignity, opulence, and population; and the others shall be stated without preference, in a kind of progress from the south-west to the north.

LONDON, the metropolis of England, is situated in an extensive plain or valley watered by the Thames, and only confined on the north by a few small elevations; being a place of great antiquity, and first mentioned by Tacitus. It now includes Southwark, a borough on the other side of the Thames, and Westminster, another city on the west; so that like some places of ancient geography, it might be named *Tripolis*, or three cities. The noble river Thames is here about 440 yards in breadth, crowned with three bridges, crowded with a forest of masts, and conveying into London the wealth of the globe, forming an excellent port, without the danger of exposure to maritime enmity. It is, however, a great defect, that instead of open quays and streets on the banks of the stream, the view is obstructed on both sides by irregular masses of building, which do not even admit of a path. London presents almost every variety which diversifies human existence. Upon the east it is a sea-port, replete with mariners and with the trades connected with that profession. In the centre, it is the seat of numerous manufactures and prodigious commerce; while the western or fashionable extremity presents royal and noble splendor, amidst scenes of the highest luxury and most ruinous dissipation.

Few cities can boast a more salubrious situation, the subjacent soil being pure gravel; by which advantage, united with extensive sewers, the houses are generally dry, cleanly, and healthy. Provisions and fuel are poured into the capital, even from distant parts of the kingdom; the latter article being coals, from the counties of Northumberland and Durham, transferred by sea, and thence denominated sea-coal.† London requires in one year 1,762,100 quarters of grain, 101,075 beeves, 707,456 sheep, with

* Gough's Caud. II. 124. 131. Gray's Poems, notes.

† Mr. Middleton, in his view of Middlesex 1798, supposes that half a million of chaldrons are yearly consumed in that county.

calves and pigs in proportion : the vegetables and fruits annually consumed, are valued at 1,000,000 sterling.*

The population of London has by some been exaggerated to a million of souls ; but by the enumeration, in 1801, there were males 393,369, females 471,476 ; total 864,845. If to these be added the regiments of guards, the militia in London, and the seamen on the Thames, the population would exceed 900,000.† The number of houses was 126,414. Its length from Hyde-park corner on the west, to Poplar on the east, is about six miles ; the breadth unequal, from three miles to one and less ; the circumference may be about sixteen miles. The houses are almost universally of brick, and disposed with insipid similarity ; but in recompence, most of the streets are excellently paved, and have convenient paths for foot passengers : a mark of respect to the common people, almost unknown to the capitals on the continent. Another national feature, is the abundance of charitable foundations for almost every infirmity and distress incident to human nature. The multitude and rich display of the shops impress strangers with astonishment ; nor are they less surprised at the constant torrent of population rolling through the principal streets, nor at the swarm of carriages at all times crowding all the roads to the capital, and the nocturnal illuminations, which extend even to four or five miles of the environs. Its waters are raised by machinery, and conducted in innumerable pipes for domestic uses ; while the parts more remote are supplied with water from some small ponds near Hampstead, and from that laudable work of Middleton, the New River, which conveys a copious addition from the north.

The environs of London present a spectacle almost as grand and interesting, as that of the metropolis itself. Extensive streets of villas and houses are continued in almost every direction within seven or eight miles. Yet few of the public edifices in London can pretend to much magnificence. The cathedral of St. Paul's forms one of the chief exceptions ; the exterior architecture of this principal cathedral of the Protestant faith being majestic to a degree of sublimity, but the interior is defective in decoration.

Westminster-abbey may claim the next rank to St. Paul's cathedral ; being not only in itself a grand impressive edifice of the Gothic class, but as being the sanctuary of the illustrious dead of all ranks, periods, and professions, from the victorious monarch down to the humble pedagogue. It was founded by Sebert, king of the East Saxons ; was afterwards ruined by the Danes, and re-founded by Edward the confessor, whose tomb is the most ancient now remaining. The present edifice was the work of Henry III. ; and Henry VII. added an elegant chapel, and his tomb the work of Torrigiano : in the vaults under this chapel, the late monarchs and their offspring have been deposited. Adjacent are the two houses of parliament, and Westminster-hall ; a vast room, 230 feet long and 70 wide, with a curious ceiling of Irish oak, and apartments

* Ibid. 267. Mr. Pennant, Brit. Zool. iv. 9, says 60,000 lobsters are annually brought to London from near Montrose.

† Christian Observer, I. 335.

on the side, in which are held the principal courts of justice.

The churches and chapels exceed 200 in number, and a few are of beautiful architecture. Some are the productions of Inigo Jones; as is also the noble banqueting-house at Whitehall, with a masterly ceiling painted by Rubens, representing the apotheosis of James I.

Near London-bridge, is a pillar of 193 feet, called the Monument; being destined to commemorate the conflagration of London in the reign of Charles II. The Tower is venerable from ancient fame; and remarkable for the curiosities which it contains. The royal palace of St. James's is an irregular building, of very modest aspect. The queen's palace, formerly Buckingham-house, only aspires to elegant convenience; but contains some valuable paintings, and an excellent library formed solely by the taste of the reigning monarch. The palace of Kensington presents an exuberance of valuable pictures, little known, and rarely visited. The houses in the west end of the town, of themselves shew the gentle gradations of rank in England; those of the chief nobility being rarely distinguishable from the others.

YORK. Next to the capital in dignity, though not in extent nor opulence, is York; which is not only the chief of a large and fertile province, but may be regarded as the metropolis of the North of England. The name has been gradually corrupted from the ancient Eboracum; by which denomination it was remarkable even in the Roman times, for the temporary residence and death of the Roman Emperor Severus. This venerable city is divided by the river Ouse; and the Gothic cathedral is of celebrated beauty, the western front being peculiarly rich, the chief tower very lofty, and the windows of the finest painted glass. York divides with Edinburgh the winter visits of the northern gentry. Its inhabitants, according to the enumeration in 1801, amounted to 16,145, and its houses to 2,000.

LIVERPOOL. Liverpool, in Lancashire, is now much nearer to London in wealth and population; being the seat of a vast commerce, which has been continually on the increase since the beginning of the last century, when it was merely a village. In 1699, Liverpool was admitted to the honor of being constituted a parish. In 1710, the first dock was constructed; and the chief merchants came originally from Ireland, a circumstance which has given a distinct tinge to the manners of the town. Thenceforth the progress was rapid, and in 1760 the population was computed at 25,787 souls.* In 1773, they amounted to 34,407; in 1787, to 56,670; and by the enumeration in 1801, they were found to have increased to 77,653. The number of houses was then 9,925.

The number of ships which paid duty at Liverpool in 1757, was 1371; in 1794, they amounted to 4265. In the African trade, till lately, a distinguishing feature of Liverpool, there was only one ship employed in 1709; in 1792, they amounted to 132. In the recent act for the contribution of seamen to the royal navy, according to the ships registered in each, the estimate is as follows:

* Aikin's Man. 333, et seq.

London	5725	Hull,	731	Bristol,	666
Liverpool,	1711	Whitehaven,	700	Whitby,	573
Newcastle,	1240	Sunderland,	669	Yarmouth,	506.

BRISTOL is still a large and flourishing city, though much of its commerce with the West Indies and America have passed to Liverpool. This metropolis of the west of England gradually rose to eminence in the Anglo Saxon period; and was so flourishing and opulent in the reign of Henry II. that, besides other charters, he granted the possession of Dublin, in Ireland; and a colony from Bristol was accordingly transplanted.* The trade with Ireland has continued chiefly to centre in this city: even in that reign, as ancient writers inform us, the port of Bristol was replete with vessels from Ireland, Norway, and other parts of Europe. Bristol is pleasantly situated at the confluence of the Frome with the Avon. The hot-wells in the neighborhood appear, to have been known in 1480: but the water was chiefly used externally, till about the year 1670; when a baker dreaming that his diabetes was relieved by drinking the water, he tried the experiment and recovered.† Since that period its reputation has increased, and many commodious and elegant erections have contributed to recommend these wells to invalids. In the adjacent rocks are found beautiful crystals, which, before the introduction of artificial gems, were greatly in fashion for female ornaments. The trade of Bristol is chiefly with Ireland, the West Indies, or North America, Hamburg and the Baltic. By the navigation of the two rivers Severn and Wye, Bristol also engrosses much of the trade of Wales. In 1787, Bristol employed about 1600 coasting vessels, and 416 ships engaged in foreign commerce.‡ Inhabitants in 1801; 63,645. Houses 10,896.

BATH. The proximity may here authorize the mention of Bath, esteemed the most elegant town in England. The hot-baths, from which it derives its name, were known in the Roman times; nor was their celebrity lost, even in the dark period of Anglo-Saxon history. But the town has been greatly enlarged and decorated in the last century. The waters are used both internally and externally, chiefly in gout, bilious, and paralytic cases; being frequent-ed at two seasons in the year, what is called the spring season from April to June, and the autumnal from September to December. Two thirds of the company are attracted merely by amusement, society, and dissipation; in all which, it is only second to London. Situated in a vale, Bath is very hot in summer. The houses are constructed of white stone, which abounds in the vicinity. Its inhabitants in 1801, amounted to 32,200, and its houses to 4,463.

But next to Bristol in point of opulence, must be classed the towns of Manchester, Birmingham, and Sheffield.

MANCHESTER, in Lancashire, was known in the Roman times under the name of Mancunium, a small Roman station; but it continued in obscurity till the time of Elizabeth, when Camden men-tions its manufacture of woollen-cloths, then called *cottons*. Dur-

* Barrett's Bristol, 49, 57.

† Ibid. 93.
§ Aikin's Manchester, 149, 156.

‡ Ibid. 190.

ing the civil wars under Charles I. Manchester remained in the hands of the parliament. In 1708, the inhabitants were only computed at 8,000. In 1757, they fell short of 20,000; in 1802 they were 84,020. The number of houses was 12,823. The cotton manufactures of Manchester are sufficiently known over Europe.*

BIRMINGHAM, in Warwickshire, was originally a village, belonging to a family of the same name, whose monuments remain in the old church. Leland mentions it as a town inhabited by smiths and cutlers, in the time of Henry VIII.; and by lorimers, now called bit-makers. The extension and improvement of Birmingham originated in a great degree from Mr. John Taylor, who introduced the manufacture of gilt buttons, and japanned and enamelled works; but the toy manufacture was known in the reign of Charles II. The great fabric called Soho, belonging to Messrs. Boulton and Watt, is situated about two miles from Birmingham, but in Staffordshire. Between the year 1741 and 1790, Birmingham had received an augmentation of seventy two streets, 4172 houses, and 23,320 inhabitants:† the population in 1802, amounted to 73,670; and the houses to 16,403.

SHEFFIELD, in the most southern part of Yorkshire, is styled by Leland the chief market-town in Hallamshire (for in the north, many particular districts usurp the name of shires). The company of cutlers of Hallamshire was established by act of parliament in 1625: but Sheffield had been distinguished for a kind of knives called whittles, and other articles of cutlery, as early as the thirteenth century; yet till within the last half century, the manufactures of Sheffield were conveyed weekly to the metropolis, on pack horses. In 1751, the river Don was rendered navigable to within two miles of the town; which facilitated the export. The plated goods commenced about 1758. In the year 1615, the population only amounted to 2152; in 1755, to 12,983; in 1789, about 30,000.‡ In 1802, it was 31,314.

The other chief towns in England, shall be classed, in a geographical order, beginning at the south-west, and proceeding to the north.

FALMOUTH, in Cornwall, the most westerly port in England, with a population of 5,855, is chiefly remarkable for the arrival and despatch of packet boats. Exeter, in the county of Devon, is an ancient and respectable city. It is the seat of an extensive commerce in coarse woollen goods, manufactured in a part of Somersetshire and in Devon and Cornwall.§ They are exported to Italy, and other parts of the continent, to the annual valse, as is supposed, of 600,000l. and the East India company purchase yearly to a considerable amount. Besides the native wool of the above-mentioned counties, Exeter imports from Kent about 4000 bags a year. Some ships are also occupied in the codfshery of Newfoundland, and in the Greenland capture of whales. The imports are from Spain, Italy, Hamburgh, and the Baltic; and coals from the north of England and Wales. It is, moreover, the residence of many

* Aikin's Man. 149. 156.

† Aikin's Man. 539. et seq.

‡ Hutton's Hist. of Birmingham.

§ Aikin's Engl. delineated, p. 355.

genteel families; and the frequent resort of others from the neighbouring counties. Inhabitants, 17,398.

DORCHESTER, the chief town of the county of Dorset, is a place of considerable antiquity, situated on the river Frome; but has no manufactures, and is only celebrated for its malt liquor. Inhabitants, 2,402.

SALISBURY, the principal town of Wiltshire, is chiefly remarkable for extreme neatness; and for its cathedral, a beautiful piece of Gothic architecture, with the loftiest spire in England, the height being 400 feet. There is a manufacture of flannels, and another of cutlery goods and hardware, the superiority of the scissars being particularly noted. Inhabitants, 9513; houses, 1353. Wilton, in the same county, is famed for the manufacture of beautiful carpets.

WINCHESTER, the chief city of Hampshire, was for many centuries the metropolis of England; a pre-eminence which it did not wholly lose till the thirteenth century.* The port was Southampton; but the superior safety and convenience of that of London, gradually restored the latter to that metropolitan dignity which it held in the Roman period. Winchester remains a venerable city, with many vestiges of ancient fame and splendor. It is situated in a bottom, amid open chalky downs, upon the small river Itchyn. The cathedral rather impresses the idea of majestic gravity, than of magnificence; and has no spire, having been erected before that mode of architecture was used. The ashes of several Saxon monarchs are here preserved with reverence. Not far from the cathedral stands the celebrated college founded by William of Wickham, and which has set forth many illustrious characters. The regulations of this school are in some instances peculiar and severe; but in this, and the other grand English seminaries, the equality of the pupils, except in respect of age and abilities, and even the subserviency in which the younger are held by the elder, tend to steel and fortify the mind against the subsequent cares and emulations of life. In the centre of the city, is a small but most elegant Gothic cross; and at the western extremity is the shell of a palace, built under the direction of Sir Christopher Wren, yet heavy and inelegant; it was begun by Charles II., but left unfinished at his death. It has since been used for French prisoners, and in 1796 was the residence of about 640 emigrant priests from France. The inhabitants of this city, by the late enumeration, amount to 5,826.

In the same county is situated Portsmouth, the grand naval arsenal of England. The harbor is noble and capacious; narrow at the entrance, but spreading out into an inland bay five or six miles in length, and from two to four in breadth. The advantages derived from nature have been improved by the art and industry of successive generations; and to a patriot, Portsmouth presents one of the most interesting scenes to be found in the British dominions. The regular fortifications towards the land, in

* Milner's Winchester.

themselves happily a novelty to the British eye, the magnitude and variety of the maritime objects and manufactures, and the prospect of Spithead, the grand focus of naval armament, conspire, with a thousand relative ideas concerning the power of England, supreme in every sea, to excite our astonishment and exultation. Inhabitants, exclusive of Gosport, 32,166.

LEWES is esteemed the chief town of Sussex; the situation is lofty and picturesque, especially the site of the ancient castle belonging to the once powerful Earls of Warren and Sussex. Beneath, in a pleasant plain watered by the river Ouse, stand the ruins of an ancient nunnery. Inhabitants, 6,200.

CHICHESTER retains some little traffic. Brighthelmstone is a fashionable resort for the sea-air and bathing. It presents the nearest open shore to the capital, and is distinguished for the peculiar mildness and salubrity of the air. Inhabitants, 7,339.

CANTERBURY, the chief town of Kent and the metropolis of the English church, is chiefly remarkable for ecclesiastical antiquities. Its inhabitants amount to 9000. The county town is Maidstone, noted for hops and thread. Kent presents many other important towns, as Deptford, Greenwich, Woolwich, Gravesend, Chatham, Rochester, and the fashionable resorts of Margate, Ramsgate, and Tunbridge. Dover and Deal are remarkable havens.

Having completed this brief survey of the chief towns to the south of the Severn and the Thames, those of the middle and northern counties may be again commenced from the west.

HEREFORD, the capital of a county bordering on Wales, was known in the Saxon times as an episcopal see. The castle, supposed to have been founded in the reign of the Confessor, is on the left bank of the river Wye. The cathedral is large; but the town presents little remarkable, having gone into great decay: the only manufacture is that of gloves.* Inhabitants, 6,828; houses, 1279.

GLoucester, the capital of the county so called, is admired for the regularity of the four principal streets joining in the centre of the town. It avails itself of the traffic of the Severn; which, among other fish, affords a luxurious supply of lampreys. This town has been recently celebrated for its neatness, and the cheapness of provisions. Inhabitants, 7,579.

WORCESTER is also situated on the noble river Severn, over which there is a beautiful bridge. The manufactures are chiefly gloves and woollen stuffs; and the porcelain maintains a high reputation. Inhabitants, 11,353.

On the east, the first town of note is **Coventry**, esteemed the most inland and central of the English towns; whence, perhaps, the military phrase of sending a man to Coventry, where he would be the most remote from service. The manufactures are chiefly ribbons, with a few gauzes and camlets. The beautiful cross, erected in 1541, after being much damaged by the lapse of years, has been taken down.† Inhabitants, 16,034.

The next memorable town is **Norwich**, the capital of Norfolk;

* Gough's Camden, ii. 450.

† Gough's Camden, vol. ii. p. 345.

From its size and consequence, justly styled a city.* It is, however, not mentioned till the year 1004; when it was ruined by the Danes. The worsted manufactory is supposed to have been introduced here by the Flemings, in the twelfth century, and was followed by that of sayes, arras, bombazeens, &c. Of late the damasks, camlets, crapes, stuffs, &c. here wrought, have been computed at the yearly value of 700,000l.; but the fashionable use of cottons, and the interruption of commerce by war, have considerably lessened the consumption. The wool is chiefly from the counties of Lincoln, Leicester, and Northampton; the chief exports, to Holland, Germany, and the Mediterranean,† Norwich is of course opulent and extensive, but the streets are confined and devious. Inhabitants, 36,850; houses, 7,500.

YARMOUTH is a noted sea-port, with a beautiful quay; and remarkable for its fisheries of mackerel in May and June, and herrings in October and November: the latter, cured by salt and dried in the smoke of wood, are called red-herrings; and, besides home consumption, form a considerable article of export to Spain and Italy. Inhabitants, 14,845.

In proceeding northwards, Lincoln must arrest attention; though now much fallen from its former fame. The interior of the cathedral is admired for its lightness and magnificence. The sheep of the county form a celebrated breed, but the wool goes chiefly to Norwich. Lincoln trades in coals, imported on the Trent. Inhabitants, 7,398.

The city of Chester is of Roman origin, and the chief streets are singular in their construction, being excavated beneath the level of the ground, while a covered portico, in the front of the houses, affords an elevated and sheltered foot-path; beneath are the shops and warehouses, on the level of the street, to which the passenger descends by occasional stairs. The trade of Chester is not considerable, but it carries on a share of the traffic with North Wales; and its two annual fairs are famous for the sale of Irish linens. It is the favorite residence of many genteel families from Wales.‡ Inhabitants, 15,052; houses, 2,583.

Near an extensive bay of the Irish sea, which might now be termed the bay of Lancaster, while antiquaries affect to retain the Roman name of *Moricambe*, stands Lancaster, an ancient and populous town. The name is in the north pronounced Loncaster, the proper etymology, as it stands upon the river Lon. When the counties of Cumberland and Westmoreland belonged to the Scots, this was regarded as a kind of frontier place; and was defended by a strong castle, situated on a commanding eminence. Lancaster afterwards gave the title of Duke to princes of the royal blood; and the contentions of the houses of York and Lancaster are well known. There is a bridge of five arches over the Lon; which opens into a considerable haven, the seat of a moderate commerce, especially with the West-Indies. Inhabitants, 9,030.

* A Bishop's see constitutes a city.

† Aikin, 216.

‡ Pennant's Tours. Aikin, 90.

On the east, the extensive province of Yorkshire contains many flourishing towns, besides York, and Sheffield, already described. On the Humber, the wide receptacle of many rivers, stands the great sea-port of Hull, or Kingston-upon-Hull; the latter name being only that of the rivulet. The town was founded by Edward I. Several privileges were obtained from Richard II.; and the first staple of trade, was stock-fish imported from Iceland. In the civil wars of last century, Hull displayed the first flag of defiance against the monarch. The harbor is artificial, and is supposed to present the largest dock in the kingdom. The trade is important with America and the south of Europe, but chiefly with the Baltic; and several ships are employed in the northern whale fishery. The coasting traffic is extensive in coals, corn, wool, and manufactures: and Hull supplies the commerce of many northern counties; having not only communication with the Trent, and other branches of the Humber, but with the rivers and canals of Yorkshire.* Its inhabitants amounted in 1801 to 29,516.

Leeds, Bradfield, Halifax, and Wakefield, are the chief centres of the great manufactures of woollen-cloths and stuffs. Leeds is the principal part for broad-cloths, or what foreigners term fine English cloth. It is situated on the river Aire, in an extensive vale. The population of the parish amounts to 53,162, and the houses to 6691: the cloths are woven in the neighboring villages; but are dyed, prepared, and sold at Leeds. The cloth-hall appropriated to the sale, is a vast edifice; and the whole business is transacted within the space of an hour on the market days. Halifax is an elevated situation, and very populous. It is the chief market for the thinner woollen-cloths; such as stuffs, calimancos, &c. Scarborough, on the eastern coast, is a place of celebrated resort for sea-bathing, and on account of its mineral water; the site is romantic, but the port is small, and chiefly frequented by fishing vessels.

Durham is a pleasant and venerable city, extending partly over an eminence: the river Were, winding around in the form of a horse shoe, renders it peninsular. Near the neck of land is placed the castle, of which little more than the keep remains; which is surrounded by the pleasant garden of the bishop's adjacent palace. Some branches of the woollen manufacture are carried on at Durham, and a few elegant carpets have been lately made there in a kind of Mosaic form. Inhabitants, 7530.

Stockton on the river Tees, Sunderland at the mouth of the Were, and South Shields on that of the Tyne, are sea-port towns in the bishopric (for so the county of Durham is commonly styled in the north) of considerable size, trade, and population. Hart-le-Pool is only a bathing place.

On the river Tyne stands Newcastle, so termed from a fortress erected by Edward I. This large and populous town, containing 28,366 inhabitants,† is placed in the centre of the grand coal-mines in the counties of Durham and Northumberland, which have for

* Aikin, Eng. delin. 56.

† Hassel says 36,963 in 1801.

centuries supplied London and most of the east and south of England with that fuel ; which has, perhaps, contributed more to the manufactures and commerce, and consequent wealth and power of this kingdom, than any other material or circumstance. The coal fleets sometimes amount to five hundred sail ; their station is at Shields, and the quays Jarrow and Willington. Even as a nursery of seamen, the trade is invaluable.* In all parts of the neighborhood are seen large carts laden with coals, and proceeding towards the port, on inclined planes, without the help of horses or men, to the great surprise of the stranger.† Near Newcastle are also found quarries of grind-stone ; and many glass houses smoke around, the productions of which have been recently of remarkable purity. Other exports are, pickled salmon, lead, salt, butter, and tallow. The suburb of Gateshead stands on the south of the Tyne, and is connected with the city by a grand bridge. The shops and crowded streets recal the idea of London ; but the latter are generally narrow, steep, and incommodious.

Berwick-upon-Tweed, being on the Scottish side of the river, shall be reserved for the description of that country. The chief remaining town in England is Carlisle, the capital of the county of Cumberland, placed at the confluence of the rivers Pettril and Caldew, with the Eden.‡ The old fortifications remain nearly entire. It is supposed to have been the ancient Luguballia ; but neither the castle nor cathedral are remarkable. The chief manufactures are linens printed and checked, whips, and fish hooks. The town is little, but populous, containing 10,221 inhabitants ; and is chiefly memorable for transactions in the ancient wars between Scotland and England.

Wales, a country abounding in the sublime and beautiful features of nature, contains many towns of note ; and the description of a few has been reserved to this place, for the greater clearness of arrangement.

Caermarthen, the capital of a county, is also regarded as the principal town in South Wales : it stands upon the river Towy, and was anciently defended by a castle, now demolished. The haven is shallow, and the trade of course not very considerable.§ Inhabitants, 5548.

Pembroke, on a creek of Milford haven, is a small town of little commerce.

Caernarvon is esteemed the chief town of North Wales for the beauty of the situation, regularity of the streets, and above all for the grandeur of the castle, one of the most magnificent in Europe, founded by Edward I. in 1282. Here was born Edward II. surnamed of Caernarvon, who was immediately created the first English Prince of Wales ; his father having equivocally promised to the vanquished Welsh a prince born in their own country, and who could not speak one word of English. The town has a considerable trade with London, Bristol, Liverpool, and Ireland, and

* Gough's Camden, iii. 252.

‡ Sr. Fond. voyage en Angl. i. 163.

† Gough's Camden, iii. 175.

§ Gough's Camden, ii. 504, 507.

has a beautiful quay along the side of the Menai, a streight between North Wales and Anglesea.*

Bridges.] The bridges are worthy the superiority of the English roads ; and a surprising exertion in this department, is the recent construction of bridges in cast iron, an invention unknown to all other nations. The first example was that of Coalbrookdale, in Shropshire, erected over the Severn in 1779. This bridge rests on abutments of stone-work, the main rib consisting of two pieces, each 70 feet long, connected by a dove-tail joint fastened with screws. The road over the bridge is made of clay and iron flag, 24 feet wide and one deep ; the span of the arch, 100 feet 6 inches ; height from the base line to the centre, 40 feet ; the weight of iron employed, 378 tons 10 hundred weight.† Another iron bridge has since been erected in the vicinity. A stupendous iron bridge was thrown over the harbor at Sunderland, about five years ago ; the height of which is 100 feet, and the span of the arch 236 : it is composed of detached pieces, which, if damaged in any of the parts, may be withdrawn and replaced by others. It is supported between two strong and elevated stone piers, and the arch is surmounted at either end by vast hoops, supporting the platform or passage of the bridge, which is thus rendered almost level. When viewed from beneath, the elegance, lightness, and surprising height, excite admiration, and the carriages appear as if passing among the clouds.

Inland Navigation.] This article is important to the best interests of the country, and demands particular attention. The earliest inland navigation that can be authenticated, is the Sankey canal, leading from the coal-pits at St. Helens, in Lancashire, to the river Mersey, and constructed in order to convey coals to Liverpool.‡ The length of the canal is twelve miles, with a fall of ninety feet. The act of parliament passed in 1755 ; the original intention was only to render the rivulet called Sankey Brook, navigable ; but it was found more advantageous to form a canal along its course. The surveyor was Mr. John Eyes.

But the Duke of Bridgewater is justly venerated as the grand founder of inland navigation : his spirit and opulence were happily seconded by Brindley, than whom a greater natural genius in mechanics never existed. It was in the year 1758 that the first act was obtained for these great designs. The first canal extends from Worsley mill, about seven computed miles from Manchester, and reaches that town by a course of nine miles. In this short space almost every difficulty occurred that can arise in similar schemes ; but mountains and rivers yielded to the genius of Brindley. There are subterraneous passages to the coal in the mountain, of near a mile in length, sometimes cut through the solid rock, and occasionally arched over with brick ; with air-funnels to the top of the hill, some of them thirty-seven yards perpendicular. This beautiful canal is brought over the river Irwell, by an

* Pennant's Wales, ii. 223. 227. † Gough's Camden, ii. 417.
‡ Philips, Hist. of Inland Navigation.

arch of thirty-nine feet in height, and under which barges pass without lowering their masts. The Duke of Bridgewater soon afterwards extended a canal of twenty-nine miles in length, from Longford-bridge, in Lancashire, to Hempstones, in Cheshire.

After this deserved tribute to the fathers of inland navigation in England, it will be eligible to review the other canals in a geographical manner, proceeding from the north to the south.

First in order is the Lancaster canal, extending from Kendal, in Westmoreland, by Lancaster, to West Houghton, in Lancashire, a space of about seventy-four miles.

The canal from Leeds to Liverpool, directed in a northerly course by Skipton, winds through an extent of one hundred and seventeen miles; and from this canal a branch also extends to Manchester, begun in 1771.

From Halifax to Manchester is another considerable canal, commonly called that of Rochdale; length thirty-one miles and a half, begun in 1794.

Another canal extends from Manchester towards Wakefield; and another called the Peak Forest canal, stretches from the former, southeast, about fifteen miles.

Another joins the river Dun, several miles above Doncaster, to the river Calder, near Wakefield.

To pass several of smaller note, the Chesterfield canal extends from Chesterfield, in the county of Derby, to the Trent at Stockwith, a course of 44 miles and three quarters, begun in 1770.

In Lincolnshire, one canal extends from Lincoln to the Trent, and another from Horncastle to Sleaford. Grantham canal reaches from that town to the river Trent, a course of 30 miles.

The grand design of Brindley was to join, by inland navigation, the four great ports of the kingdom, Bristol, London, Liverpool, and Hull. Liverpool is accordingly connected with Hull by a canal from that long navigable river the Trent, and proceeding N. to the Mersey. The canal which joins these two rivers is styled the Grand Trunk; and was begun in 1766, under the direction of that great engineer; but was not completed till 1777: the length is 99 miles. It was attended with great difficulties, particularly in passing the river Dove, in Derbyshire, where there is an aqueduct of twenty-three arches, the tunnel through the hill of Hare-castle in Staffordshire, is in length 2880 yards, and more than 70 yards below the surface of the ground, and was executed with great labor and expense.* But the utility corresponds with the grandeur of the design: salt from Cheshire, coals and pottery from Staffordshire, and manufactures from various places, are transported on this canal.

From the Grand Trunk five or six branches extend in various directions: among which must not be omitted that to the river Severn, near Bewdley, which connects the port of Bristol with those of Liverpool and Hull; the length is 46 miles; completed in 1772.

* Cary's Plans, p. 26, 27, 28. The account of the Grand Trunk in Philips, is very defective; he may here be referred to in general for the others. See also Housman, 122

From the city of Chester one canal extends to the Mersey, and another to Namptwich ; another proceeds south to Shrewsbury, uniting the Mersey and the Severn ; with north-west and south-east branches of considerable length.

From Coventry, in the centre of the kingdom, canals extend to the Grand Trunk ; to Ashby-de-la-Zouch, and to the Braunston, or Grand Junction canal.

What is called the Staffordshire canal, extends from the Grand Trunk to the river Severn ; and is met by the Kington canal, which reaches to Kington, in Herefordshire, so as almost to join the rivers Trent and Wye. It may be here observed, that in this description the grand courses of navigation are attended to, rather than the minute names and divisions of the canals.

Several inland navigations pass by Birmingham. The Union canal completes a course of forty-three miles and three quarters, from Leicester to Northampton, whence the river Nen is navigable to the sea.

Another canal extends from Gloucester to Hereford : and the south of Wales presents several navigations of considerable length, particularly that from Brecon, in Brecknockshire, to Newport, in Monmouthshire.

The Severn is not only joined with the Trent and the Humber, by various courses of navigation, but is united with the Thames, by a canal extending by Stroud to Lechlade, a course of near 40 miles.

Other canals branch out from the Thames in various directions : that of Oxford extends to the Grand Trunk, or rather joins the Coventry canal, after a course of ninety-two miles.

The Braunston, or Grand Junction canal, reaches from Brentford, on the Thames, and joins the Oxford canal at Braunston, in Northamptonshire, after a course of ninety miles. It is styled the Grand Junction, because it may be said to unite the numerous courses that pervade the central counties, with the capital of the kingdom.

On the south of the Thames, a canal proceeds from Reading to Bath ; and another from Weybridge to Basingstoke ; and a third from Weybridge to Godalming.

A small canal or two have been executed in Devonshire. The Andover canal, in Hampshire, extends from Andover to Southampton water. Sussex presents two canals, that of Arundel, and that of Lewes.

Manufactures and Commerce.] The manufactures and commerce of England, form so extensive a theme, that only a brief and fugitive idea of them can be here attempted. The earliest staple commodity of England was tin, a metal rarely found in other countries. The Phoenicians first introduced it into commerce, at least five or six hundred years before the Christian æra ; and their extensive trade soon diffused it among the Oriental nations. The Romans, upon their conquest of these regions, did not neglect this source of wealth ; but as Cornwall was not conquered by the Anglo-Saxons, till the reign of Athelstan, we know not whether the Cor-

nish Britons carried on any considerable traffic in this commodity, though it be probable that it was at least exchanged for the wines of France. Yet even in the reign of John, the product was so inconsiderable, that the mines were farmed to Jews for 100 marks; but in that of Henry III., they began again to yield a large profit, which has gradually increased.*

Cornwall, like most countries that abound with minerals, presents an external aspect of desolation: a series of barren hills and bleak heaths pervades its whole length; and the violent winds from the sea check the vegetation of trees and shrubs. The tin mines are numerous, and of various descriptions. This metal is either found in the mass, in what are called *lodes* and *stools*; or in grains, or bunches, in the rocks; or detached in separate stones, called *shodes* or *strings*; or in a course of such stones called the *beuheyl* or *living string*; or in the pulverized shape of sand. After having been pounded in a mill, it is melted into blocks of 320 pounds weight. In the ore it is styled black tin; and is sometimes, though very rarely, found in a metallic state.

The singularity and importance of this first national staple, may apologize for this discussion; but the abundance of the other topics will require more brevity. Wool had been regarded as a grand staple of England, as early as the twelfth century, but was chiefly exported in a crude state, till Edward III. encouraged settlements of Flemish manufacturers. Wool soon became the standard of private property, and the prime article of commerce. Taxes and foreign subsidies were estimated by sacks of this commodity.† Great quantities of raw wool continued to be exported to the Netherlands and Hanse Towns; but in the reign of Elizabeth it began to be chiefly manufactured at home, and the exportation of woollen cloths was then valued at a million and a half annually. The exportation of raw wool was at length prohibited; and the woollen manufactures preserve great importance, though they no longer attract such particular regard, amidst the exuberance of English manufactures.

In recent times the manufactures of iron and copper, native minerals, have become great sources of national wealth; nor must the new and extensive exportation of elegant earthen ware be forgotten. The cotton manufacture is diffused far and wide, forming a grand source of industry and prosperity. That of linen, except of sail-cloth, is not much cultivated in England. The manufactures of glass and fine steel, clocks, watches, &c. are deservedly eminent and extensive. As the nation is indebted to Wedgewood for converting clay into gold, so to Boydell for another elegant branch of exportation, that of beautiful prints.

Besides manufactured articles, England exports a number of native products too numerous to be here mentioned.

The English manufactures have been recently estimated at the annual value of 63,600,000*l.* and supposed to employ 1,585,000 per-

* Borlase's Cornwall.

† Campbell's Political Survey, vol. ii. p. 161, 152. A work opulent in materials, but of most tedious and uncouth execution.

sons.* Of these, the woollen manufacture is supposed to yield in round sums, 15,000,000*l.* the leather 10,000,000*l.* the iron, tin, and lead 10,000,000*l.* the cotton 9,000,000*l.* The other chief manufactures, which yield from 1 to 4,000,000*l.* may be thus arranged, according to their consequence; steel, plating, &c. copper and brass, silk, potteries, linen and flax, hemp, glass, paper.

The commerce of England is, at the present period, enormous, and may be said to extend to every region of the globe. The trade with the West Indies is one of the most important, and that with the East Indies alone, would have astonished any of the celebrated trading cities of antiquity.

The following table exhibits the amount of the imports, exports, and tonnage† of Great Britain every 10th year of the last century, and every year of the present.

Year.	Imports.	Exports.	Tonnage.
1700	£ 5,970,175	£ 7,302,716	317,328
1710	4,011,341	6,690,828	
1720	6,090,083	7,936,728	
1730	7,780,019	11,974,135	
1740	6,703,778	8,869,939	471,451
1750	7,772,039	15,132,004	661,184
1760	9,832,802	15,579,073	573,978
1770	12,216,937	14,266,653	760,971
1780	11,714,967	13,689,073	753,977
1790	19,130,886	20,120,121	1,404,960
1800	30,570,605	43,152,019	1,924,042
1801	32,795,557	42,301,701	1,958,373
1802	31,442,318	41,411,966	1,895,116
1803	27,992,464	31,578,495	1,788,768
1804	29,201,490	34,451,367	1,802,063
1805	30,344,628	34,954,845	1,857,652
1806	31,094,089	36,528,132	1,897,603
1807	28,854,658	34,566,570	1,791,072
1808	27,186,025	34,554,267	1,425,592
1809	30,406,560	50,301,763	1,993,188
1810			

The extent of the commercial shipping of the British empire was September 30th, 1805, as follows :

	Ships.	Tons.	Men and Boys.
England	14,790	1,799,210	117,668
Jersey Isles	185	16,528	2,011
Man	404	9,650	2,336
Scotland	2,581	210,295	15,160
Ireland	1,067	56,806	5,070
The Plantations	3,024	190,953	15,467
 Total	22,051	2,283,442	157,712

* Mr. Grellier in the Monthly Mag. January 1801.

† Tonnage of ships cleared outwards British and Foreign.

The following table exhibits the number of vessels which entered inwards from various countries and cleared outwards for them from Great Britain, principally in 1806.

	Year.	Inwards.	Outwards.
Russia	1806	1,127	702
Denmark	1806	1,607	1,690
Sweden	1806	353	362
Prussia	1805	1,946	1,627
Germany	1806	604	956
Holland	1804	790	521
Portugal	1806	468	332
Spain	1806	222	126
Streights	1806	24	83
Italy	1806	90	61
Malta	1806	26	6
Minorca	1802	25	5
Turkey and Levant	1806	23	3
Africa	1804		176
West Indies	1804	721	790
United States	1806	561	575

The following table gives the value of the imports and exports of Great Britain to and from various countries in the latest year of which we have information.

	Year.	Imports.	Exports.
Ireland	1800	2,312,824	3,741,499
Russia	1802	2,182,430	1,376,399
Denmark	1802	155,672	537,517
Sweden	1803	288,651	98,045
Prussia	1803	831,225	1,916,502
Germany	1801		11,115,304
Holland	1803	630,403	1,565,355
France	1792		1,228,166
Portugal	1800	916,848	1,011,893
Spain	1796	809,881	546,126
Streights	1805	42,919	183,824
Italy	1805	393,517	507,535
Malta	1805	9,304	127,515
Minorca	1802	22,106	21,478
Turkey and Levant	1805	103,590	185,411
Africa	1800	82,289	1,017,369
India	1804	5,866,073	(1791) 320,129
China			(1791) 1,012,539
West Indies	1803	6,148,436	(1804) 3,408,232
United States	1800	2,357,922	6,885,507
British Provinces	1800		997,590

The imports from Ireland to Great Britain, are produce of various kinds; linens, yarn, pearl ash and copper ore: the exports to Ireland are coals, herrings, hops, flax, hemp, and almost every species of manufactures.

The imports from Russia, are iron, hemp, flax, tallow, pot ash, lumber, and coarse linens: the exports are West India produce and British manufactures.

From Denmark and Norway, Great Britain receives timber and corn, and returns West India produce and foreign merchandize, and but few of her own manufactures.

Great Britain imports from Prussia, grain, hemp, flax, madder, linseed, quills, bristles, pearl ash, millstones and timber; and exports drugs, groceries, dry goods, and crockery.

Germany receives from Great Britain, large quantities of British manufactures, and still larger of foreign merchandize. The imports from Holland, consist of butter, cheese, geneva, juniper berries, flax, hemp, oak bark, seeds, books, maps, and prints; the exports returned, are sugars, train-oil, copperas, cotton and woollen goods, coffee, rice, and foreign merchandize.

From Portugal she imports wine, cotton-wool, indigo, cash and bullion; and returns British produce and manufactures.

From the Mediterranean are imported cotton-wool, mohair, goat's-hair, drugs, dye-stuffs, currants, figs, raisins, goat-skins, box-wood and raw silk. The exports consist of lead, tin plates, wrought and cast iron, hard ware, watches, cotton, woollen, and India goods, coffee, sugar and spices.

The coasts of Africa furnish the arabic, sandarach and senegal gums, cam-wood, red-wood, ebony, ivory, ostrich feathers, and skins; and are supplied with shells, trinkets, ardent spirits, guns, gunpowder, cutlasses, hard ware, rice, groceries, drugs, woollen, cotton, linen and India goods.

The exports to India are woollens, metals, naval and military stores; the imports are piece goods, raw silk, tea, pepper, salt-petre, nankeens, china ware, sugar, coffee, indigo and drugs.

The exports to China, are bullion, woollens, lead, tin, skins, furs, glass, jewelry, trinkets, watches, cutlery and hard ware; the imports are teas, nankeens, china ware, and silks.

The imports from the West Indies, in return for British manufactures, are sugars, rum, molasses, coffee and cotton.

From the United States are imported cotton, flour, timber, potash, iron, rice, indigo, tobacco; and the exports are British manufactures and foreign merchandize of almost every description.

The annual income of Great Britain was estimated in 1799, by Mr. Pitt, at 102,000,000; and including the money, of which the estimate is far from certain, the whole capital of Great Britain may perhaps be calculated at more than one thousand two hundred millions.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Climate and seasons.] THE climate of Great-Britain is perhaps more variable than that of any other country on the globe, as the vapors of the Atlantic Ocean are opposed to the drying winds from the Eastern Continent. The Western coasts in particular, are subject to frequent rains; and the Eastern part of Scotland is of a clearer and dryer temperature than that of England. The humidity of the climate, indeed, clothes the delicious vales and meadows with a beautiful verdure; but is injurious to the health of the inhabitants, by causing colds and catarrhs, the frequent sources of more deadly disorders.

In consequence of the mutability of the climate, the seasons themselves are of uncertain tenor, and the year might more properly be divided into eight months of winter, and four of summer; than into any theoretic arrangement, originating in the southern latitudes. What is called the spring, dawns in April, commonly, indeed, a mild month; but the eastern winds prevalent in May, seem commissioned to ruin the efforts of reviving nature, and destroy the promise of the year. June, July, August, and September, are usually warm summer months; but a night of frost is not unknown, even in August, and sometimes a cold East wind will blow for three days together; nor of late years are summers unknown of almost constant rain.* The winter may be said to commence with the beginning of October, at which time domestic fires become necessary; but there is seldom any severe frost till Christmas, and January is the most stern month of the year. March is generally the most unsettled month of the year, interspersed with dry frost, cold rains, and strong winds, with storms of hail and sleet.

Face of the country.] Mr. Pennant, in his Arctic Zoology, has given an admirable description of part of the English shores, which shall here be abbreviated, with an alteration in the arrangement, as he chooses to begin with the Straights of Dover.

From the mouth of the Tweed to Bamborough, extends a sandy shore; and the most remarkable object is Lindesfarn, or Holy Island, divided from Northumberland by a level, which is dry at low water, but out of which the flowing tide oozes suddenly, to the terror and peril of the unwary traveller. From Bamborough Castle, to Flamborough-head, are mostly low cliffs, of lime-stone, and other materials. Scarborough stands on a vast rock, projecting into the

* The summer of 1800 was remarkable for dryness and warmth, scarcely any rain falling from the 6th of June to the 20th of August, when a thunder storm succeeded.

waves; but Flamborough-head is a far more magnificent object, being formed of lime-stone, of a snowy whiteness, and stupendous height, visible far off at sea.

Hence to the Humber are commonly clay cliffs; and near Spurn-head, amber is sometimes found. The extensive coast of Lincolnshire is flat, and, according to Mr. Pennant's opinion, has been gained from the sea; though, in some parts, the sea has in its turn invaded the land, and the remains of a forest are visible under the waves. The county of Lincoln, and part of six others, are the low countries of Britain; and the coast is distinguishable by churches, not by hills. The shores of Norfolk and Suffolk present sometimes loamy or clayey precipices, sometimes hillocks of sand, and sometimes low and flat spaces. Hunstanton cliff rises to the height of about eighty feet, composed of chalk and friable stone, resting on a base of what is called iron-colored pudding stone, projecting into the sea. The coast of Essex is generally low; but to the south of the Thames, arise continued cliffs of chalk, with layers of flint, resembling masonry. The north Foreland is a lofty chalky promontory; and the cliffs of Dover are known to every reader of Shakespeare.

It is to be regretted, that Mr. Pennant did not extend his animated description to the southern and western coasts: cliffs of chalk and clay are interspersed with flat gravel, till the island of Portland presents its bold rocky front. The western shores abound with granite, slate rocks, and lime-stone.

Soil and agriculture.] The soil is greatly diversified, but in general fertile; and in no country is agriculture more thoroughly understood, or pursued in a grander style, except, perhaps, in Flanders and Lombardy. The nobility and gentry, mostly residing upon their estates in summer, often retain considerable farms in their own hands, and practise and encourage every agricultural improvement. The writings of Mr. Young, the institutions in the west, and the Board of Agriculture, recently erected, have contributed to diffuse a wide and lasting knowledge of this interesting branch. The intermixture of the green crops with those of grain, the use of turnips, the irrigation of meadows, the regular substitution of crops appropriated to the state of the land, the art of draining conducted on scientific principles, may be mentioned among the recent advances of knowledge; nor must the improvements in the breed of sheep and cattle, introduced by Bakewell and others, be forgotten.

The cultivated acres in England and Wales are computed at upwards of 39,000,000, while those uncultivated are 7,888,777. Of these it is supposed that not above half a million is wholly unimprovable, and perhaps a million is only fit for plantations, while of the remainder one quarter is fit for tillage, and three fourths for meadow and upland pasture.* The grain of every kind annually consumed in England, for three years ending in 1809, was 20,600,800 quarters; and in Scotland, 3,988,400; total 24,589,200. Of this

* First Report of the Committee of the house of Commons, p. 22.

$\frac{1}{21}$ st part is imported, and $\frac{1}{10}$ th part from Ireland. So that only between $\frac{1}{22}$ d and $\frac{1}{23}$ d part comes from foreign countries.

Horticulture, or the art of gardening, is also pursued in England with great assiduity and success. The large supply of the capital in vegetables and fruits, and the high prices given for early produce, occasion such a spirit of cultivation, that each acre thus employed, is supposed to yield about 120*l.* annually, the yearly consumption in the metropolis being computed at more than 1,000,000*l.* Of ornamental gardens, laid out with a just attention to the beauties of nature, and free from the uncouth affectations of art, England is deservedly regarded as the parent country.*

Rivers.] England is intersected by four important rivers, the Severn, the Thames, the Humber, and the Mersey.

The Severn rises from the mountain Plinlimmon, and after an easterly course to Shrewsbury, bends its progress almost south to Gloucester, whence it flows south-west into the Bristol Channel, a progress of about 150 miles, navigable as far as Welch-pool. Its chief tributary streams are the Northern and Southern Avons, the Teme and the Wye.†

The Thames originates in Cotswold-hills, Gloucestershire; and maintains a south-easterly direction, to its egress into the German Ocean, after receiving the Cherwel, the Teme, the Kennett, another Wye, the Mole, and Lee. The Medway flows into the estuary of the Thames, as the Wye into that of the Severn. The course is computed at 140 miles, navigable to Cricklade.‡

The Humber is a name almost confined to a large estuary, which receives many considerable rivers, that fertilize the central parts of England. Of these the Trent is the most important, which rises at New-pool, in Staffordshire, and proceeding north-east, enters the Humber, after a direct course of about 100 miles, being navigable to Burton, in Staffordshire. The other principal rivers that issue into the Humber are the Dun, a navigable stream, which runs by Doncaster; the Aire navigable to Leeds, and the Calder to Halifax, both singularly useful in transporting the woollen manufactures; the Warf to Tadcaster; the Ure, or Ouse, which runs by York, navigable to Rippon; the Derwent, which is navigable to New Malton; and the Hull.

Though the Mersey present a grand estuary, its course is not of great extent. It arises in the West Riding of Yorkshire, and runs to the south-west; but the estuary bends towards the north. The direct course is not above fifty miles; and it is navigable to Stockport: as the Irwell to near Manchester, and the Weever to near Northwich, and the mines of rock-salt.

In briefly describing the other navigable rivers of this kingdom, it may be proper to return to the Severn, and, proceeding south west, pursue the outline of the coast. The Avon is navigable to Bath, the Parret to Ilchester, the Tone to Taunton, the Taw to Barnstaple, and another branch to Bideford: the Cam of Cornwall, to Wedbridge, while the Plym, Dart, and Ex, can also

* Lord Orsford on Modern Gardening.

† Campbell, i. 146.

‡ Ibid. I. 139.

be pervaded to a considerable height. Another Avon is navigable to near Salisbury, the Itchen to Winchester, the Arun to Arundel, the Ouse to Lewes: the Rother, which forms the haven of Rye, is yet navigable, though fallen in fame. The Stour admits boats even to Canterbury; but the Medway presents a navigable stream as far as Tunbridge. On the north of the Thames, the Lee is navigable to Bishop's Stortford and Hertford: the Crouch conveys boats from the sea to Hull-bridge in Essex; the Black-water to Chelmsford, and another branch to Colchester. The Stour is navigable to Sudbury; the Orwell to Stow, the Deben to Woodbridge; the Yare and Waveney present access to Foulsham, Norwich, and Bungay. Next is the estuary called the Wash, which receives the Ouse, the Nen, the Welland, the Witham, all streams of considerable navigation.

On the North of the Humber, the Tees admits vessels to Stockton; the Tyne to Newcastle. On the West, the Eden is navigable to Carlisle; the Lune or Loin to Lancaster and Hornby; the Dee to Chester; the Conway to within two miles of Llanrwst; the Towy to Llanbedr. Milford Haven presents branches navigable to Haverford-west, and to near Wiston: and lastly, the Wye may be pursued as far as Hay in Brecknockshire.

In general it may be observed of the British rivers, that the length of their course is inconsiderable, when compared with that of the Continental streams. The rivers of the southern and the middle parts of England, present a striking contrast to those of the north; the former pursuing a slow and inert course over mud, between level banks, amid rich and extensive meadows; while the latter roll their clear torrents over beds of gravel, between elevated banks and rocky precipices; and even when verdant levels occur, the stream still retains its banks and beds of gravel.

Mountains. Bennevis, the highest mountain in Scotland, is not much above one quarter of the height of Mont Blanc, the sovereign of the Alps, and the English and Welch summits aspire to heights still less considerable; Snowdon being only 3568 English feet above the sea, while Bennevis is 4387, or, by other accounts, 4350. Wharn, or Wharnside, in Yorkshire, was estimated at 4050; and Ingleborough at 5280 feet. A late accurate measurement has, however, reduced this latter to 2480 feet, and probably Wharnside ought also to be diminished in the same proportion.

Even at the present day, the geography of some parts of New Holland, is better understood than that of some parts of Great Britain. There is not even a separate map of the English rivers, though France set an example of this kind, a century and a half ago; nor has there been any attempt to delineate the chains of mountains in England. The imperfections of the materials must therefore apologize for any errors or defects in the subsequent slight sketch. The mountains of Cheviot may be said to form a regular ridge, running from the south-west, where they join those of Galloway to the north-east. But there is a central ridge which pervades England from north to south, beginning at Geltsdale forest, 14 miles S. E. of Carlisle, and passing on the west of Durham

and Yorkshire, where it contains mines of coal and lead. The chief elevations, such as Kelton-fell, Stanmore, Widehill-fell, Wild-boar-fell, Bow-fell, Home-fell, Bunhill, &c. &c. arise on the western limits of Yorkshire. Cumberland and Westmoreland present many detached mountains, Skiddaw, &c. which can hardly be reduced to any distinct arrangement; but those of Craven, in the West Riding of Yorkshire, as Wharnside, Ingleborough, and Pennington; and Pendle, on the east of Lancaster, belong to the Central Chain, which proceeds south, through Derbyshire, still abounding with minerals and natural curiosities; but here it seems to terminate, spreading a little into Cheshire. A central chain, of smaller elevation, may be traced, in a zig-zag line, to near Salisbury, with two diverging and irregular branches on the east, one towards Norfolk, another into Kent, while a third runs south-west into Cornwall. To the first belong the hills of Gogmagog, in Cambridgeshire, &c. to the second the hills of Hampshire, Surrey, and Kent. Another upland tract of considerable elevation, called the Chiltern hills, extends from Tring, in Hertfordshire, to Henley, in Oxfordshire. Malvern hills, in Worcestershire, deviate from the central ridge, while those of Cotswold, in Gloucestershire, may be regarded as a continuation of it. The hills of Mendip, Polden, Sedgemoor, Blackdown, in Somersetshire; the Tors and Wilds of Dartmoor, in Devon; and the hills and upland downs of Cornwall, extend this chain to the Land's End: and after passing this last rocky province, it expires in the Islands of Scilly.

Wales is a country abundant in mountains, especially the northern provinces; but their orography remains indeterminate, and it would require the actual survey of an experienced engineer, to reduce them to chains or groupes. To begin with the north, Snowdon commands the first attention, a mountain of eminent height and fame. The top is called Y Widdfa, or the conspicuous, forming almost a point, and presenting a view of the county of Chester, the mountains of Yorkshire, part of Scotland and Ireland, and the Isles of Man and Anglesey.*

The stone that composes it is hornslate and argillaceous schistus, large coarse crystals are often found in the fissures, and very frequently cubic pyritæ, the usual attendants on Alpine tracts. From Snowdon, a line of mountains extends by the sea to Plinlimmon, a boundary of North Wales, whence issue the noble rivers Severn and Wye. Of these hills, Urrou Seth, Caer Idris, and Moel Vadiau, are the most memorable. The hills on the east of North Wales are far from attaining such considerable elevation, and gradually decline to the hills of Shropshire, of which the Wrekin is one of the most noted.

A chain proceeds due south to near Cardiff, in South Wales; it is of far inferior height, and a small branch diverges to the west, consisting of Cwm Cothy, Mynydd, Carreg, Brilley, and Cwm Kerrun-hills. On the east of South Wales, are the hills of Herefordshire, the Black Mountain, Cusop-hill, Hargett, Stockley-hill, &c.

* Pennant's Journey to London, p. 170.

In the northern and western mountains and hills, chalk is unknown, while it forms a chief material of those of the south and east. An eminent naturalist observes, that a line drawn from Dorchester, in the county of Dorset, to the county of Norfolk, would form a boundary of the great chalky stratum which intersects the kingdom, none being found in any quantity to the north or west of that line.* The northern mountains are mostly composed of lime-stone, free-stone, slate, or schistus, with mines of lead or coal; those of Derbyshire present vast masses of lime-stone, intersected with thick veins of toad-stone, and numerous fossils and minerals, the consideration of which is reserved for a future article. The summit of Skiddaw presents white shivery slate, or argillaceous schistus; but some of the Westmoreland mountains contain siliceous schistus; and it is probable that granite may exist in those of Cheviot. The vast base of Ingleborough, near 30 miles in circuit, consists of lime-stone; on the east side full of shells to near the summit, which is of grit and sand stone flag; the fossils, black and brown marble, thin slate, near Ingleton, rotten stone, or tripoli, and some lead ore.† And such is this chain to its termination; while further to the south, the easterly elevations are of chalk; and those on the west, as Mendip hills, in Somersetshire, are wholly calcareous. The granite begins at Dartmoor, in Devonshire, and continues through Cornwall, where it occurs of various colours, the grey granite, or moor stone; the red, or oriental; the white, the yellow, and the blueish, or pigeon-coloured.‡ Near the Lizard and Mullion, are rocks of serpentine and steatites, together with a decomposed granite, which is similar to the petunsi of China, and applied to the same purposes in the manufacture of porcelain.

The Welsh mountains abound in slate, horn-stone, and porphyry, with large masses of quartz. The Wrekin, about ten miles east of Shrewsbury, is chiefly composed of reddish chert, or petrosilex, with siliceous sand-stone, basalt, and a kind of granite.§ The great coal district of Colebrookdale, rests on indurated clay, while that near Bristol is accompanied by black free-stone, and even the calcareous free-stone near Bath, is interspersed with numerous veins of coal. The Malvern hills, on the S. W. of Worcestershire, run N. and S. about ten miles, and afford many granitic rocks with chert and hornblende slate.¶ These few notices must suffice on the composition of the English mountains, a subject which only begins to attract the attention which its curiosity deserves.

Forests.] To the reader of poetry, the word *forest* conveys the idea of a region replete with thick and tall woods, interspersed with romantic lawns and murmuring rivulets. But in England a forest is sometimes bare of trees, or not unfrequently only presents a few withered oaks; and the term is even applied to upland downs

* Pennant's Journey from Chester to London, p. 214.

† Guide to the Lakes, 265, 267.

‡ Pryce's Mineralogy of Cornwall. Maton's Western Tour, &c.

§ Townson's Tracts, p. 163.

¶ Ibid. 216.

and heaths. Many of the forests were, even in the Anglo-Saxon times, esteemed royal demesnes ; but the Norman monarchs were so much addicted to the chase, that upwards of sixty forests at one time, appertained to the crown ; of which the chief now remaining are the forests of Dean, in Gloucestershire ; Sherwood, in Nottinghamshire ; Windsor, in Berkshire ; and the New Forest, in Hampshire. The royal forests constituting so large a part of the kingdom, subject to peculiar regulations, many grievances arose, till the Barons exacted from Henry III. the forest-charter ; in which several despotic laws were revoked, and more equity extended to the neighboring proprietors and tenants.

General sketch of British botany.] Among the numerous species of vegetables which are natives of Britain, scarcely any are adequate to the sustenance and cloathing of man. Its frequent rains, its blasting winds, and the scanty portion to which it is shielded, of the light and heat of the sun, deprive it entirely of those vegetables which, in tropical climates, satisfy the wants and luxurious desires of their human inhabitants. The never-failing verdure of its plains and hills, shews how admirably the country is qualified for the support of graminivorous quadrupeds ; and we find accordingly, that its ancient forests abounded in stags and roe-deer, as its clear and cultivated lands do now in sheep and cattle.

The Flora, of Britain, though it cannot boast the most splendid and exquisite of vegetable productions, yet contains as great a variety of genera and species, as any other country of equal extent. The investigation of indigenous plants is continually carrying on here with increasing ardor, and every year brings new accessions to our crowded ranks of native vegetables.

The first for importance and variety is the family of GRASSES. Almost every part of the country that is not under tillage, is principally covered with grass. Twenty-seven genera, and a hundred and ten species are natives of the island, most of them of common occurrence in situations where they are found at all. None of them have been proved to be poisonous, either to man or beast ; on the contrary, whether fresh or dried, they furnish a grateful food to all the domestic cattle. The most important grasses in meadows and pastures, are the *meadow fox-tail grass* ; two or three species of *hair grass*, and *meadow-grass* ; the *cock's-foot fescue*, and *oat grass*. Other species are natives of marshes, and wet places ; these are generally the largest and most luxuriant, and if in quality they be somewhat inferior to the preceding, yet the defect is probably more than compensated by the quantity of herbage that they supply. Light sandy soils, especially the flat parts of the eastern and southern coasts, abound in grasses that are distinguished from their kindred species, by the length and strength of their creeping-roots. The inhabitants of Skey, and the other western islands of Scotland, manufacture them into durable ropes : and while growing, they serve the very important purpose of binding together the loose sand, which otherwise would be drifted far up the country. Upon the sides and summits of the mountains are found a few grasses that do not appear elsewhere, mixed with some others of more

general occurrence ; as, however, in these bleak and elevated situations, covered with snow for some months in the year, and shrouded in clouds for the principal part of the remainder, it would be scarcely possible for these plants to bring their seeds to maturity, we observe in them a wise and striking deviation from the common course of nature. Like the rest of their tribe, they throw up flowering stems and bear blossoms ; but these are succeeded, not by seeds, but by bulbs ; which, in a short time, vegetate, and are already furnished with a leaf and roots, before they fall to the ground : all the viviparous grasses except one (*Festuca vivipara*) if transplanted to a lower and warmer situation, accommodate themselves to their new climate, and produce seeds. Besides these there are others of a more hardy constitution, which appear to be the true natives of the mountains, and multiply their species by seed in the usual way.

Nearly allied to the grasses in general habit, are a number of species, natives of moors, bogs, and pools ; these serve to give consistency to the deep mud or peat, in which they are rooted, and, when young, afford a coarse pasture to sheep and cattle ; several of them are used for matting, thatching, and for chair bottoms. The stately *Typha* (bull rush) is one of the principal ornaments of the fens, and neglected pools, and the several species of cotton-grass enliven many a dreary mile of bog, by their gracefully pendant tufts of snowy white.

The Leguminous, or papilionaceous plants, so called from their winged blossoms, form a very important division in British botany. The herbage of all when fresh, and of many when dry, is a most grateful food to horses, cattle, and sheep ; and several of them, as the clovers and vetches, are largely cultivated for this purpose. Many of this class are climbers, and adorn the thickets and hedges with elegant festoons of blossoms and foliage. Almost all the English papilionaceous plants flourish best in light calcareous soils, either rocky or sandy ; and some of them, as the lady's finger, and saintroin, may be reckoned certain indications of chalk or lime-stone.

The umbelliferous plants form another large class in the natural arrangement of British vegetables, consisting of about sixty species. The roots and seeds of those kinds which grow on dry, light soils, are frequently aromatic ; those that are natives of marshes and moist meadows, are, for the most part, in a greater or less degree poisonous. The whole class, indeed, is a suspicious one, and excepting the fennel and celery, not a single native species is cultivated for the food of man or beast.

Perhaps the most splendid of all the herbaceous plants, are the bulbous rooted, which, from their general resemblance to the lily, have obtained the name of Liliaceous ; most of these, however, are natives of warmer climates ; the sandy deserts about the Cape of Good Hope, and the shores of the Indian ocean, produce the most beautiful species. Of those which are found wild in England, there are only twenty-eight species ; and the greater number of these are of rare occurrence in a truly native state ; the spring and autumnal crocus, the snow-drop, the snow-flake, the three kinds of

Narcissus (including the daffodil), the fritillary, tulip, and lily of the valley, are more familiar to us as garden plants, than as natives of the woods and pastures. The common ones of this class are Ramsons, a species of garlic, meadow saffron, and the beautiful and fragrant hare bell, or wild hyacinth, one of the principal ornaments of the groves and thickets, even at a time when they are profuse of beauties.

The native fruits belong, for the most part, to the class of Rosaceous plants; such as, the wood-strawberry, the bullace and black-thorn, the hawthorn, crab, and mountain ash; the common bramble, or blackberry, the raspberry, stone-bramble, and cloud-berry. The cherry, the medlar, the service, and pear-trees, whose fruit, when wild, is of so little account, and of such value when improved by cultivation, belong also to this class.

One of the largest of the natural classes of English vegetables, is that of the radiated or compound flowered plants, (including about 120 species.) Only one, the *Tragopogon porrifolius* (*falsafly*), is applied to the sustenance of man, and not one is cultivated for the use of cattle. Most of this class have an ungrateful bitter taste, and the succulent ones contain a white milky juice, of an acrid flavor. The sow thistle, hawk-weed, burdock, thistle, cudweed, coltsfoot, groundsel, dandelion, daisy, and yarrow, are the most commonly occurring genera.

Such of the trees and shrubs as have not been already mentioned, may be considered as forming a peculiar class, and one of great importance; it is naturally subdivided into the evergreen and deciduous.

The most valuable of the native evergreens are, the box, the pine, the yew, and the holly; those of secondary consequence, are the juniper, and ivy; the spurge laurel; the cranberry, and those extremely ornamental plants, the *Vaccinium vitis idaea* (red whortle berries); and *Arbutus uva ursi* (bear-berry).

The deciduous timber-trees that are either aboriginal, or at least have been long naturalized to the soil, are the oak, the chesnut, and beech, the birch, the alder, the horn beam, the abele, the black poplar, and the aspen, bearing catkins; the sycamore, the maple, and the ash; the lime, the elm, and wych hazle. A middle station between the timber-trees and shrubs is occupied by the hazle, and the numerous species of willow. The pulpy-fruit-bearing shrubs are, the currant and gooseberry, the elder, the barberry, the bilberry, the cornel, or dogwood, the buckthorn, the guelder rose, and the mezereon; the four first are wholesome and grateful to the palate; the rest are either insipid or noxious.

The ferns comprise a number of elegant plants that grow in moist, shady, and uncultivated places, the uses of which have been but little inquired into; about forty-four species are natives of Britain; the roots of most abound in a mild sweetish mucilage, which in times of scarcity has been resorted to for nutriment; the larger and commonest kinds, such as common fern, or brakes, are collected and burnt for the potash which is yielded from their ashes; the *Equisetum hyemale* (shave grass) is much used by

turners and cabinet makers, as a fine file to smooth their work with.

The last class of English vegetables, that we shall mention, is that of the marine *Algæ*, or sea-weeds. Between two and three hundred species are found upon the British shores; the more tender and gelatinous kinds, are eaten either raw or boiled, and the rest on those rocky parts of the coast, where they can be collected in great quantities, are burnt into kelp for the use of the soap-boilers and glass-makers.

Zoology.] Mr. Pennant, in his British Zoology, has treated this subject at due extent, and with his usual ability. The nature of this work will only admit of a few imperfect notices. Of animals, that celebrated author enumerates twenty genera, from the horse down to the seal and bat. The birds extend to forty-eight, the reptiles to four, and the fish to forty genera, besides the crustaceous and shell fish.

That noble and useful animal, the horse, is found in England of many mingled breeds, while most other kingdoms produce only one kind.* Their race-horses descend from Arabian stallions, and the genealogy faintly extends to our hunters. The great strength and size of the English draught-horses are derived from those of Germany, Flanders, and Holstein; and other breeds have been so intermingled, that native horses may be found adapted to every purpose of pomp, pleasure, or utility. Those of Yorkshire are particularly celebrated for their spirit and beauty; and the grooms of that country are equally noted for their skill in the management of this valuable animal.

The indigenous horned cattle are now only known to exist in Neidwood-forest, in Staffordshire, and at Chillingham-castle, in Northumberland. They are long-legged and wild like deer, of a pure white color, with black muzzles, ears, and tails, and a stripe of the same hue along the back. The domesticated breeds of cattle are almost as various as those of horses; those of Wales and Cornwall are small, while the Lincolnshire kind derive their great size from those of Holstein. In the North of England the kylies, so called from the district of Kyle, in Scotland; in the South are the elegant breed of Guernsey, generally of a light brown color, and small size, but remarkable for the richness of their milk.

The number and value of sheep in England may be judged from the ancient staple commodity of wool. Of this most useful animal several breeds appear, generally denominated from their particular counties or districts; those of Herefordshire, Devonshire, and Cotswold downs, are noted for fine fleeces, while the Lincolnshire and Warwickshire kind are remarkable for the quantity. The Teesdale breed of the county of Durham, though lately neglected, continue to deserve their fame. The wool is beautiful, but the length of their legs lessens their value in the eyes of the butcher.

The mutton of Wales, on the contrary, is esteemed, while the wool is coarse, yet employed in many useful and salutary manufactures.

* Pennant's Zoology, vol. i. p. 1.

The most laudable exertions have lately been made by the Board of Agriculture, and by individuals, for the improvement of the English fleece.

The goat, an inhabitant of the rocks, has, even in Wales, for the most part yielded to the more useful sheep; that country being, like Scotland, more adapted to the woollen manufacture. The breeds of swine are various and useful.

England also abounds in breeds of dogs, some of which were celebrated even in Roman times; nor have their modern descendants, the mastiff and bull-dog, degenerated from the spirit and courage of their ancestors.

Of savage animals the most fierce and destructive is the wild cat, which is three or four times as large as the domestic, with a flat broad face, color yellowish white, mixed with deep grey, in streaks running from a black list on the back; hips always black, tail alternate bars of black and white; only found in the most mountainous and woody parts. The wolf has been long extinct, but the fox abounds.

The chief of birds of prey are, the golden eagle, sometimes found on Snowdon; the black eagle has appeared in Derbyshire; the osprey, or sea eagle, seems extinct in England. The peregrine falcon breeds in Wales; and many kinds of hawks in England. An enumeration of the other birds would be superfluous. The nightingale, one of the most celebrated, is not found in North Wales, nor any where to the North, except about Doncaster, where it abounds; nor does it travel so far west as Devonshire and Cornwall.* The poultry seem to originate from Asia; the peacocks from India; the pheasants from Colchis; the guinea-fowl are from Africa. The smallest bird is the golden-crested wren, which sports on the highest pine-trees; and the largest the bustard, some of which weigh twenty five pounds, and are found in the open countries of the south and east. The most useful of the water fowl is the mallard or wild-duck, which is chiefly caught in the fens of Lincolnshire; the numbers sent to the capital, almost exceed credibility.

The reptiles are frogs, toads, several kinds of lizards: of the serpents the viper alone is venomous; other kinds are the snake, sometimes found four feet in length; and the blind worm, seldom exceeding eleven inches.

Of fish, the whale but seldom appears near the English coasts, the porpess, and others of the same genus are not uncommon. The basking shark appears off the shores of Wales. Numerous are the edible sea-fish. Some of the most celebrated are the turbot, doree, soal, cod, plaice, smelt, and mullet. The consumption of herrings and mackerel extends to most parts of the kingdom; but pilchards are confined to the Cornish coasts. The chief river fish are the salmon and the trout, which are brought from the northern parts in prodigious numbers, generally packed in ice. It is said that not less than 30,000 salmon are brought from one river, the Tweed, to London, in the course of a season. The lamprey is

* *Pennant's B. Z. I.* 360.

chiefly found in the Severn, the charr in the lakes of Westmoreland.

The lobster is found on most of the rocky coasts, particularly off Scarborough, and the English oysters maintain their Roman reputation. The green from Colchester, in Essex, and the juicy white from Milton, in Kent, have the chief reputation.

Mineralogy.] It seldom or never happens that countries, abundant in the productions of agriculture should, at the same time, present an opulent mineralogy. Yet England is far from being deficient in this respect.

The tin mines in Cornwall have been already mentioned ; and they are not only venerable from their antiquity, but are, it is supposed, the richest of the kind in the world. That kind of silver termed by mineralogists horn ore, is also found in that district ; but the profound secrecy observed in working it, forbids any investigation of the amount. The Huel rock boasts of what is called bell-metal ore ; and of wolfram.

Cornwall also produces copper at Redruth, Alstone, and the Land's End. The same metal is found in Yorkshire and Staffordshire ; but no where in such abundance as in the Parrys mountain, in the north west of Anglesea.* Instead of descending in veins through various rocky strata, the usual form of metallic ores, it here forms a prodigious heap, and is worked in the manner of a quarry. The mountain is almost bare of shrubs or grass ; and is covered with aluminous slate, under which, in grey chert, is the ore, being chiefly the yellow sulphuret, of very variable richness. This valuable mine was discovered about thirty years ago.

Lead is found in the Mendip-hills, Somersetshire ; which also produce calamine and manganese. The lead-mines in Derbyshire are well known, not only for that metal, but for the beautiful veins of fluor, which accompany it, and which is manufactured into several ornamental articles. In general the northern central ridge of mountains, abounds with lead-ore. The lead-mines of Alston, on the eastern verge of Cumberland, employ about 1100 men.

No metal is so widely diffused through the globe as iron ; and England not only contains excellent mines, but excels all nations in the variety of fabrication. The most remarkable mines of iron, are those of Colebrookdale, Shropshire, Dean-forest in Gloucestershire, with some in the north of England, particularly near Ulverston, in Lancashire.

Among the minor metals, zinc, in the form of lapis calimanaris, and blonde, is found in Derbyshire, Denbighshire, Cornwall, and other regions. Nickel and arsenic sometimes appear in Cornwall ; and recently, what is called menachanite. But one of the most important of this kind is plumbago, or black lead, which is found in the ridge of Borrowdale, near Keswick, in Cumberland : the mine is only opened at certain intervals of time.

Gold has been discovered in various quarters of England, but the metal has never recompensed the labor and expense. The

* Aiken's Wales, 133.

real gold mines of England are those of coal, found in the central, northern, and western parts, but particularly in the northern, around Newcastle. The coals of Whitehaven and Wigan are more pure; and the cannel and peacock coals of Lancashire, are so beautiful, that they are suspected by some to have constituted the *gagates*, or jet, which the ancients ascribed to Britain. A singular species of coal is found in Bovey-heath, Devonshire, resembling wood impregnated with bituminous matter. Turf or peat is common, even in Hampshire, and other southern counties.

The mines of rock salt, in Cheshire, must not be omitted. They appear to have been known to the Romans. Leland has described them in the time of Henry VIII; nor were they unknown even in the Saxon periods. Those of Northwich are the most remarkable: at Namptwich and Middlewich, are only salt springs: and others occur at Droitwich, in Worcestershire, and Weston in Staffordshire. The immense mines on the south side of Northwich, were discovered about the beginning of this century. The quarries with their pillars and crystal roof, extending over many acres, present a beautiful spectacle; the stratum of salt, lies under a bed of whitish clay, at the depth of about forty yards. The first stratum is about twenty yards thick, so solid as to be blasted with gunpowder, this salt resembles brown sugarcandy. Next is a bed of hard stone, under which is a second stratum of salt, about six yards thick, in some parts brown, in others as clear as crystal. The Witton pit is circular, 108 yards in diameter, the roof supported by twenty-five pillars, each containing 294 solid yards of rock salt; the whole covering near two acres of land. The annual produce of rock salt at Northwich, has been estimated at 65,000 tons; of which about two thirds used to be exported to Flanders and the Baltic.*

Marbles, and free-stone, or calcareous sand-stone, of various colors and textures, also occur; the most celebrated of the latter are those of Portland, Purbeck, &c. Fine alabaster appears in Derbyshire; fullers-earth in Berkshire, and some other counties.

Mineral waters.] Nor is England less productive of mineral waters, of various properties and descriptions. Those of Bath have been celebrated since the Roman times. Next to that place of fashionable resort, may be mentioned the hot-wells of Bristol, those of Tunbridge in Kent, and of Buxton and Scarborough in the North. Those of Cheltenham in Gloucestershire, have been esteemed beneficial in scorbutic cases; but to enumerate the springs of inferior note, would be infinite, as chalybeat wells at least must occur in almost every county, and new waters are daily starting into celebrity.

Natural curiosities.] Among the natural curiosities, those of Derbyshire have always been esteemed the most memorable. Hobbes and others have long since celebrated the wonders of the Peak, a mountain not equal in height to those of Wales, or the more northern part of England, but perforated with such verti-

* Pennant's Journey from Chester to London, p. 26. Gough's Camden, ii. 436. Aikin's Manchester, 427.

cal chasms, and such surprising caverns as have deservedly excited admiration.

Other remarkable caverns are found in the northern ridge of English mountains. In the vale of Kingsdale, on the western extremity of Yorkshire, is Yordas cave, which presents a subterraneous cascade. But the most noted is Wethercot cave, not far from Ingleton. It is surrounded with trees and shrubs, is in form like a lozenge, divided by an arch of lime-stone, passing under which you behold a large cascade, falling from a height of more than twenty yards; the length of this cave is about sixty yards, the breadth thirty.

The lakes of Cumberland form another grand scene of attraction, but it would be idle to attempt to depict, in a few words, beauties which have been described by so many authors, and particularly by the glowing pencil of a Gray. Suffice it to observe, that the three most celebrated lakes are those of Coniston, Windermere, and Derwent. The beauties of the first have been compared to the delicate touches of Claude; the noble scenes of the second, to those of Poussin; while Derwent has much of the sublime mildness of Salvator Rosa: but most travellers esteem Ullswater to be the most truly sublime.

The mountainous regions of Wales may well be supposed to present many natural curiosities; and the Parrys mine in Anglesea, is in itself a surprising object. The cataracts in Cumberland are rivalled by a remarkable fall of the Tees, on the west of the county of Durham, over which is a bridge suspended by chains, seldom passed but by the adventurous miners; nor must Asgarth force, in Yorkshire, be passed in silence.

The sub-marine relics of a forest, on the coast of Lincolnshire, may be deservedly classed among the most remarkable natural curiosities. On the N. W. side of the Mendip hills, is a considerable cavern, at the bottom of a deep ravine, near the little village of Berrington, or Burrington. Here are a number of human bones, gradually incorporating with the lime-stone rock; there being a continual dripping from the roof and sides, which deposits a stalactitic sediment on the bones. Several nodules contain perfect human skulls. At the farther end, where the height is about fifteen feet, there is a large conic stalactite, which nearly meets a pillar rising from the floor. This cave was only discovered about two years ago; and as the matter increases so fast, it is conjectured that it would soon have been closed up.* Hence it is probable that these bones are of no remote antiquity, and may, perhaps, be the remains of some wretches who had here taken shelter from the cruelty of Jefferies, after the insurrection of Monmouth.

ENGLISH ISLES.

IN the Southern, or English Channel, first appears the Isle of Wight, by the Romans called *Vectis*, by the Saxons *Wihlond*, of an oval form, about twenty miles in length, and twelve in breadth.

* Transact. of the Linnaean Society, vol. v.

This isle is fertile and beautiful, and decorated with many picturesque villas ; the principal haven is that of Newport. The population of the island in 1801, was twenty-four thousand. The chief mineral products are pipe clay, and fine white sand, for the fabrication of pure glass ; and at Alum-bay, on the north side of the Needles, are found considerable quantities of native alum.† One of the most remarkable buildings is Carisbrook-castle, where Charles I. was imprisoned ; it was built soon after the conquest, as appears from the book of Doomsday. The lofty white rocks styled the Needles, seem to have been disjoined from the western extremity of the isle by the violence of the waves. There were formerly three ; but about the year 1782, the tallest, which rose about 120 feet above the low-water mark, was overthrown, and totally disappeared.‡

At the distance of about seventy miles from Wight, to the S. W. arises the little isle of ALDERNEY, off the Cape la Hogue ; which is afterwards followed by the more important isles of GUERNSEY and JERSEY ; Sark being a small isle interposed between the two latter. Guernsey, the largest of these isles, is twelve miles long, nine broad, and about thirty-six in circuit. It is a verdant isle, though the soil be hilly, and barren of wood. The only town is that of Port St. Pierre.§ The population of the island in 1801, was 215,000. Jersey is about twelve miles in length, and six in breadth, a well watered and fertile island, producing excellent butter and honey. The winters are milder, but more windy, than those of England. The northern side of the island is high, but the southern subsides into pleasant vales, covered with orchards. The remarkable places are the two towns of St. Helier and St. Aubin, both standing on a bay, opening to the south ; and the castle of Mont Orgueil. The inhabitants of Jersey are computed at 20,000, of whom 3000 are capable of bearing arms. In January 1781, St. Helier was surprised by 800 French, under Rullicourt, who was killed, while Major Pierson fell on the side of the English, his valour being commemorated by paintings and prints, and by a handsome monument in the church of St. Helier. Alderney is a small isle, with a town, and about 1000 inhabitants in all. Sark has about 300 inhabitants.¶

Returning to the English shore, we first descry Eddistone lighthouse, beat by all the fury of the western waves. This edifice has repeatedly been overthrown, but the present erection by Mr. Smeaton, composed of vast masses of stone, grooved into the rock, and joined with iron, promises alike to defy accidental fire, and the violence of the ocean, though the waves sometimes wash over the very summit in one sheet of foam.

About thirty miles to the west of the Land's End, appear the isles of SCILLY, which have been deemed the Cassiterides of the ancients. This cluster is said to consist of 145 isles covered with

† Gough's Camden, i. 143.

‡ Worsley's Isle of Wight, p. 27.

§ Guernsey is chiefly remarkable for its small breed of cattle.

¶ Gough's Camden, iii. 755.

grass or moss, besides innumerable dreary rocks. The largest isle is that of St. Mary, which is about five miles in circuit, and has a castle and garrison: inhabitants about 600. That of St. Agnes is rather fertile, inhabitants about 300. The whole inhabitants of the Scilly isles are computed at about 1000. The cattle and horses small; but sheep and rabbits thrive well. Considerable quantities of kelp are prepared amid these rocks.*

On turning to the north, first appears the little isle of Lundy, situated in the Bristol Channel, about three miles long, but not a mile in breadth, with about 500 acres of good land, some rivulets, and a castle. It was formerly a noted retreat for pirates.

Some small isles lie off the Welch coast of Pembrokeshire and Caernarvon, such as *Caldy*, *Skomar*, *Bardsey*, and others: but the isle of *Anglesea* deserves more attention, being the Mona of Tacitus. Anglesea is about twenty-five miles in length, and eighteen in breadth. The chief towns are Newburg, Beaumaris, and on the western extremity, fronting Ireland, Holyhead. This isle is so extremely fertile, that the Welch have emphatically styled it the mother of Wales; and of late has been also productive of rich copper found in the Parrys mountain, in the N. E. part of the island, near Amlwich, of which an account has been given in treating of the English minerals. Its population in 1801 amounted to 33,806. Beaumaris is a large town, with a castle built by Edward I. Newburg is a corporation of smaller moment. Holyhead, originally a fishing town, has become of consequence, by the Irish packets which pass daily, the average time being twelve hours.

The last English isle worth notice is that of Man; it is about thirty miles in length, and fifteen in its greatest breadth. In the midst is a high mountain, called Snafel. The chief mineral productions are black marble, slate, lime stone, lead, copper, and iron. Man is also well stored with black cattle, and sheep; and the population has of late years greatly increased. This isle was seized by the Norwegians, along with the Western isles of Scotland, in the ninth century: and remained under these lords an independent kingdom, till the thirteenth century, when it fell with those islands to Alexander III. of Scotland. The Scots were expelled in the reign of Edward II. but the title continued dubious; for in the 15th and 16th centuries Alexander and John, Dukes of Albany, styled themselves lords of Man, and interwove the arms in their heraldry. In the reign of Henry IV. the kingdom of Man was conferred on the Stanleys, afterwards Earls of Derby, and latterly passed to the family of Athol by marriage. This petty sovereignty has been since purchased and annexed to the English crown. The chief places are Douglas and Castletown, and there are some considerable villages. The population in 1801 was about 30,000.

There are also some small islands off the eastern coast, as Lindisfarn, and Coquet island, near the mouth of the river of that

* Gough's Camden, iii. 753.

name, in Northumberland. The isle of Thanet is now joined to the land of Kent; but Sheppey remains a pleasant and interesting isle.

SCOTLAND.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, ANTIQUITIES, RELIGION, GOVERNMENT, LAWS, POPULATION, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, UNIVERSITIES, CITIES, INLAND NAVIGATION, MANUFACTURES AND COMMERCE.

SCOTLAND was first discovered to the Romans by Agricola; and in the works of Tacitus the northern part of Britain is for the first time distinguished from the southern, by the special and repeated appellation of Caledonia, a name said to be derived from a Cumraig word, signifying woodlands, forests, or, perhaps, rather a mountainous country; for the ancients often blended the ideas of forest and mountain.

The names *Caledonia*, and *Caledonians*, continued to be used till the Roman power expired. Bede, the father of English history, calls the inhabitants of the country by the name of *Picti*, which had also been used by the latter Roman writers as synonymous with that of *Caledonii*. The country he denominates *Provincia Pictorum*, the province or region of the *Picti*. This new name seems to have originated from a country so styled, in the south of Norway, whence this colony had arrived. The Saxon writers, and among them king Alfred, called the people *Peohts*, and the country *Peohtlond*.

These distinctions continued till the eleventh century, when the new name of *Scotia* was taken from Ireland, its former object, and applied to modern Scotland.

Extent.] From the *Mull of Galloway*, in lat. 54° 44', to the parallel of *Dungisbay-head*, in 58° 45' is a length of 280 miles; and from the *Point or Ru of Ardnamurchan* to *Buchanness* is a breadth of 180. The land however, is so indented by arms of the sea that, the breadth is very various, and no part is distant above 40 miles from the coast. The number of square miles is estimated at 27,794.

Boundaries.] Scotland is bounded W. and N. by the Atlantic; E. by the German Ocean, and S. by England.

Divisions.] Scotland is divided naturally into Highlands and Lowlands. The Highland district is in the N. and N. W. and is subdivided into two parts, the *West Highlands*, comprising the shires of *Dumbarton*, *Bute*, part of *Perth*, and *Argyle*; with the

isles of *Bute*, *Arran*, the two *Cambrays*, and *Inchmarnock*; and the *North Highlands*, comprehending *Inverness*, *Ross*, *Sutherland*, *Caithness*, *Athol*, *Rannock*, *Braidalbin*, *Marr*, and *Monteith*, with all the proper *Hebrides*. This district, from *Dumbarton* to the coast of *Caithness*, is 200 miles long, and from 80 to 100 broad.

The *Lowland* district comprises the E. S. E. and S. W. parts of the country. Scotland is also divided with equal propriety into three divisions, the *northern*, *middle*, and *southern*. The northern is divided from the middle by the chain of lakes reaching from the *Moray Firth* to *Loch Linnhe*. The middle is separated from the southern by the Firths of *Forth* and *Clyde*, and the great canal.

The third, or southern division, comprehends those counties that lie between the Firths of *Forth* and *Clyde*, and the English frontier; we shall also add to each county the amount of its population, according to the general enumeration of the island in the year 1801.

	COUNTIES.	INHABITANTS.
Northern Division.	Orkney and Shetland	46,824
	Caithness	22,609
	Sutherland	23,117
	Ross	53,525
	Cromarty	3,052
	Inverness	74,292
	Argyle	75,700
	Bute	11,791
	Nairn	8,257
	Murray, or Elgin	26,705
Midland Division.	Banff	35,807
	Aberdeen	123,071
	Mearns, or Kincardine	26,349
	Angus, or Forfar	99,127
	Perth	126,366
	Fife	93,743
	Kinross	6,725
	Clackmannan	10,858
	Stirling	50,825
	Dumbarton	20,710
Southern Division.	West-Lothian, or Linlithgow	17,844
	Mid-Lothian, or Edinburgh	122,954
	East-Lothian, or Haddington	29,986
	Berwick	30,206
	Renfrew	78,056
	Ayr	84,306
	Wigtown	22,918
	Lanark	147,796
	Peebles	8,717
	Selkirk	5,070
	Roxburg	33,712
	Dumfries	54,597
	Kirkudbright	29,211
		1,604,826

Original Population.] So far as historical researches can discover, the original population of Scotland, consisted of Cimbri, from the Cimbric Chersonese. About two centuries before the Christian era, the Cimbri seem to have been driven to the south of Scotland by the Caledonians, or Picti, a Gothic colony from Norway. The Cimbri, a congenerous people with the Welch, continued to hold the country south of the two Firths of Forth and Clyde : but from the former region they were soon expelled by the Picti, who, in this corner, became subject for a time to the Anglo-Saxon kings of Bernicia. On the west, the Cumraig kingdom of Strath Clyde continued till the tenth century, when it became subject to the kings of North Britain ; who, at the time, extended their authority, by the permission of the English monarchs, over the counties of Cumberland and Westmoreland, which abounding with hills and fortresses on the south and east, were little accessible to the English power; and while the Danes possessed the country to the north of the Humber, could yield little revenue, or support to the Anglo-Saxon monarchs. From the Picti originates the population of the Lowlands of Scotland, the Lowlanders having been, in all ages, a distinct people from those of the western Highlands, though the Irish clergy endeavored to render their language, which was the most smooth and cultivated of the two, the polite dialect of the court and superior classes. About the year of Christ 258, the Dalraids of Bede, the Attacotti of the Roman writers, passed from Ireland to Argyleshire, and became the germ of the Scottish Highlanders, who speak the Irish, or Celtic language, while the Lowlanders have always used the Scandinavian, or Gothic.

Progressive Geography.] The progressive geography of Scotland is little opulent in materials. In the second century we find a map of North Britain, by Ptolemy; but he represents the Mull of Galloway as the most northern promontory of Scotland, and thence bends the country due east, so that all his longitudes and latitudes were fictitious. But his distribution of the tribes which then inhabited Scotland, may be regarded as tolerably exact. In the centre of the country he places a vast forest, which he calls the *Sylva Caledonia*, chiefly extending over modern Perthshire ; an indication that the colonies had settled on the shores, and that the interior part of the country was little known. The *Oladeni* were the people of modern Northumberland and Lothian; the *Selgovæ* extended over Dumfrieshire and Kirkudbright, to the bay of Wigton, while the *Novantæ* filled modern Wigtonshire, and extended upwards to Ayr-bay. The fourth southern tribe was that of the *Damnii*, who possessed the central region from near the source of the Clyde, to that of the Erne. On the northeast of the Damnii were the *Venicentes*, from the Firth of Forth to the river Dee, while the *Texali* held the modern shires of Aberdeen and Banff. To the west of them were the *Vacomagi*, extending from Fort William to the Castra Alata, or Inverness. The other tribes scarcely deserve enumeration : the *Cornabii* possessed the most northern parts of Scotland, from Dunsbee-head to Strathna-

ver. Four tribes extended along the north-west, down to Loch Linny; to the south of which are placed the *Epidii*, in Argyleshire, who were divided by Loch Fyn from the *Gadeni*, who held that part to the east of Argyleshire, called Cowal, in the county of Dumbarton.

After the time of Ptolemy little information arises concerning the geography of Scotland, till after the lapse of seven or eight centuries, we find the dawn of the present names and divisions. In the latter Roman period, the province of *Valentia* embraced that part which was south of the Clyde and Forth; as for a short space, from about A. D. 140 to 170, the name of *Vespasiana* had been imparted to the region extending from the Forth to Loch-Ness. The remains of Roman roads form the chief evidence of the firm possession of the latter province.

In the middle ages the name of Albany had been applied to that part of Scotland which lies on the north of the Firths; and about the year 1200 was written the *Descriptio Albaniæ*. In the fourteenth century, Fordurn produced a larger and more precise idea of Scottish geography. Harding, who wrote his rhyming chronicle in the time of Edward IV. gives a tolerably exact description of Scotland, which he had visited; and some manuscripts of his work contain a rude map of the country. The first engraved map is that published by bishop Lesley, with his history; but it abounds with portentous errors, which have been slowly removed. The atlas published in the last century does honor to the industry and abilities of Pont, and the munificence of Sir John Scott; and the recent exertions of Dorrett, Roy, Mackenzie, Huddard, Ainslie, and others, have contributed to establish some exactness in the geographical and hydrographical delineation of the country.

HISTORICAL EPOCHS.] 1. The original population of Scotland by the Cimbri, and by the Picti, forms the first historical epoch.

2. The entrance of Agricola into Scotland, and the subsequent conflicts with the Romans, till the latter abandoned Britain.

3. The settlement of the Dalriads, or Attacotti, in Argyleshire, about the year 258, and their repulsion to Ireland about the middle of the fifth century.

4. The commencement of what may be called a regular history of Scotland, from the reign of Drust, A. D. 414.

5. The return of the Dalriads, A. D. 503, and the subsequent events of Dalriadic story.

6. The introduction of Christianity among the Caledonians, in the reign of Brudi II. A. D. 565.

7. The union of the Picti and Attacotti, under Kenneth, A. D. 843.

8. The reign of Malcolm III. A. D. 1056; from which period greater civilization began to take place, and the history becomes more authentic.

9. The extinction of the ancient line of kings, in the person of Margaret, of Norway, grand-daughter of Alexander III. A. D. 1290. This event occasioned the arbitrary interposition of Edward I. king of England, which was the sole source of the enmity.

ty which afterwards unhappily prevailed between the kingdoms. 10. The accession of the house of Stuart to the Scottish throne ; a family which produced most ingenious and intelligent, but most unfortunate princes.

11. The establishment of the Protestant religion, A. D. 1560. 12. The union of the two crowns, by the accession of James VI. to the English sceptre, A. D. 1603.

13. The civil wars, and the subsequent disputes between the Presbyterians and the Independents ; causes that extinguished all sound literature in Scotland, for the space of twenty years, A. D. 1640-1660.

14. The revolution of 1688, and the firm establishment of the Presbyterian system.

15. The union of the two kingdoms in 1707.

16. The abolition of the hereditary jurisdictions, 1755, which laid the first foundation of the subsequent prosperity in Scotland.

Antiquities.] The monuments of antiquity belonging to the more early epochs, may be considered in the following order. Of the first epoch, no monuments can exist, except those of the tumular kind ; and it is impossible to ascertain the period of their formation. The remains of the Roman period in North Britain chiefly appear in the celebrated wall, built in the reign of Antonius Pius, between the Firths of Forth and Clyde, in the ruins of which many curious inscriptions have been found. Another striking object of this epoch, was a small edifice on the stream of Carron, vulgarly called Arthur's Oven, which seems rightly to have been regarded by some antiquaries, as a small temple dedicated to the God Terminus.

The most northerly Roman camp yet discovered, is that near the source of the river Ythan, Aberdeenshire ; the periphery of which is about two English miles. A smaller station has also been observed at Old Meldrum, a few miles to the S. E.

Roman roads have been traced a considerable way in the east of Scotland, as far as the county of Angus, affording some evidence of the existence of the province Vespasiana ; but the chief remains are within the wall. The smaller remains of Roman antiquity found in Scotland, as coins, utensils, &c. are numerous.

With the fourth epoch may be said to commence the Pictish monuments of antiquity. The tombs it would be difficult to discriminate from those of the first epoch ; but as the Caledonian kings, when converted to Christianity, held their chief residence at Inverness, the singular hill in its vicinity, presenting the form of a boat reversed, may, perhaps, be a monument of regal sculpture. The places of judgment among the Gothic nations, or what are now styled Druidic temples, are numerous ; and there is a remarkable one in the isle of Lewis. Some of these monuments are of small circuit, and such are sometimes found at no great distance from each other ; as they were not only erected as temples to Odin, Thor, Freyga, and other Gothic Deities ; but every chief or lord of a manor, having jurisdiction over many servants and slaves, such small courts became places of necessary awe.

The houses seem to have been entirely of wood or turf; but in some spots singular excavations are found rudely lined with stone: these are called *Weems*, and it is likely that they were always adjacent to the wooden residence of some chief, and were intended as depositories of stores, &c. the roofs being too low for comfortable places of refuge. The stations and camps of the natives are distinguished by their round form, while those of the Romans belong to the square.

Under the next epoch it would be difficult to discover any genuine remains of the Dalriads. The houses, and even churches, were constructed in wattle-work; and the funeral monuments were cairns, or heaps of stones.

To the sixth epoch may probably belong a chapel or two, still remaining in Scotland; but it is probable that these sacred edifices in stone were soon followed by the erection of those rude, round piles, without any cement, called *Piks* houses; yet they may more probably belong to

The seventh epoch, when the Danes may share in the honor of the erection, for such edifices have been traced in Scandinavia. They seem to have consisted of a vast hall, open to the sky in the centre, while the cavities in the wall present incommodious recesses for beds, &c. These buildings are remarkable, as displaying the first elements of the Gothic castle; and the castle of Koningsburg, in Yorkshire, forms an easy transition. The engraved obelisks found at Forres, and in other parts of Scotland, have been ascribed to the Danish ravagers, who had not time for such erections. They are, probably, monuments of signal events, raised by the king, or chiefs, and as some are found in Scandinavia as recent as the fifteenth century, it is probable that many of the Scottish obelisks are far more modern than is generally imagined.

Religion.] It is generally believed, on the authority of the ancient Scotch historians, the venerable Bede, and other writers, that Christianity was first taught in Scotland by one of the disciples of St. John the Apostle, who fled to avoid the persecution of Domitian. It was established in the third century; one of the monarchs, with his family, being then solemnly baptized. About 565, St. Columba established the university in the island of *Icolmkill*, which was long the pride of the north. His followers the *Culdees*, continued a distinct order of regular clergy to the fourteenth century, and retained their original manners and doctrines. After that, the Romish religion reigned paramount till the Reformation. Still the dependence of the people on the Pope was very slender; and the doctrines of Luther and Calvin were no sooner promulgated, than they were adopted by the great body of the nation. Protestantism in the Presbyterian form was established in 1560. In 1578, an attempt was made to establish Episcopacy. Scotland was parcelled out into two archbishopricks, St. Andrews, and Glasgow; and twelve bishopricks, Edinburgh, Dunkeld, Dumblane, Brechin, Aberdeen, Moray, Ross, Caithness, Orkney, Galloway, Argyle, and the Isles. This continued the established religion till 1688. All this time the country was distracted by the quarrels of the

Episcopalians, Presbyterians, and Independents. In 1688, Presbyterianism was reestablished and is now the national religion. In 1732, a large body of the Presbyterians seceded from the establishment. They preserved the same form of church government, but were more strict in their sentiments than those whom they left behind. In 1747 the Seceders were subdivided into Burghers and Antiburghers. The former allow the oaths taken by the burghesses of the royal boroughs to be legal: the latter object. The former are the most numerous.

Many respectable families embrace the Episcopal form of the church of England. The other sectaries are not numerous. There are few Roman Catholics, even in the remote Highlands; the scheme of education being excellent, and generally supported with liberality.

The Presbyterian form of religion is Calvinistic in its doctrines, and establishes an entire equality of ecclesiastical authority among its clergy. The revenues of the clergy also have been nearly equal, none having been more than 200 pounds sterling, and none less than 50 pounds *per annum*. By a late act of parliament the smaller revenues have all been raised to 150 pounds.

There are four grades of ecclesiastical courts, the *General Assembly*, *Provincial Synods*, *Presbyteries*, and *Kirk Sessions*. 1st. The General Assembly is the highest ecclesiastical court in Scotland, and may with propriety be termed the *Ecclesiastical Parliament*. It consists of commissioners, some of whom are laymen, under the name of ruling elders, from Presbyteries, royal boroughs, and universities. One of the commissioners, usually a nobleman of high rank, represents the king. A moderator is chosen by the Assembly, who presides and regulates the proceedings. This is the high court of appeals from the other ecclesiastical courts, and its decisions are final. Its authority extends over Scotland. 2d. *Provincial Synods* are composed of delegates from a number of adjacent presbyteries over which they have power. 3d. Presbyteries are composed of delegates from a number of adjacent parishes. They inspect into the behaviour of the ministers and elders of their respective bounds, ordain pastors, examine and licence schoolmasters, &c. 4th. The *Kirk Session*, composed of the minister, elders and deacons of a parish, is the lowest ecclesiastical court. It has the superintendence of the poor, visits the sick, and assists the clergyman in his clerical functions.

The following is a view of the ecclesiastical establishment of Scotland, as divided into *Synods* and *Presbyteries*, with the number of ministers in each synod, in 1803.

Synods.	Presbyteries.	Ministers.
Lothian and Tweedale	-	7
Merse and Teviotdale	-	6
Dumfries	-	5
Galloway	-	3
5 Glasgow and Ayr	-	7
		116
		66
		54
		37
		130

SCOTLAND.

Perth and Stirling	- - -	5	80
Fife	- - -	4	71
Angus and Mearns	- - -	6	81
Aberdeen	- - -	8	101
10 Moray	- - -	7	54
Ross	- - -	3	23
Sutherland and Caithness	- - -	3	23
Argyle	- - -	5	41
Glenelg	- - -	5	29
15 Orkney	- - -	4	30
			—
		78	936

These 936 clergymen are settled over 877 churches, 31 of the churches being collegiate. The Scotch clergy deserve the highest praise as men of enlightened minds, and unblemished life.

The Seceders are also very numerous. The Burghers have about 100 ministers, and each has, at a medium, a congregation of about 1000. The number of the Antiburghers is less.

Government.] The government of Scotland, since the union, has been blended with that of England. The chief distinction between the original constitution of the two countries, was, that Scotland had no House of Commons, the Parliament, consisting of all descriptions, assembled in one hall. That enlightened prince, James I. of Scotland, endeavoured in vain to establish a House of Commons, in imitation of that of England, where he was educated. The most splendid remaining feature of government in Scotland, is the General Assembly. Next to which may be classed, the High Courts of Justice, especially that styled the Session, consisting of a president, and fourteen senators. The Lords of Session, as they are styled in Scotland, upon their promotion to office, assume a title, generally from the name of an estate, by which they are known and addressed, as if peers by creation, while they are only constituted lords by superior interest, or talents. This court is the last resort in several causes, and the only appeal is to the parliament of Great Britain.

It is to be regretted that the causes are not determined by jury as in England. The justiciary court consists of five judges, who are likewise Lords of Session: but, with a president, styled the Lord Justice Clerk, as he is only understood to represent the formerly great office of Justice General. This is the supreme court in criminal causes, which are determined by the majority of a jury, and not by the unanimity, as in England. There is also a court of Exchequer, consisting of a Lord Chief Baron, and four Barons; and a High Court of Admiralty, in which there is only one judge. The keepers of the great and privy seals, and the lord register or keeper of the records, may also be mentioned under this head.

The Scots are represented in the Imperial Parliament by 16 peers, elected by the nobility by writ at the calling of every parliament, who sit and vote in the House of Lords. To the House

of Commons, Scotland sends 35 members; viz. 30 knights of the shires, and 15 from the royal boroughs.

Laws.] The law of Scotland differs essentially from that of England, being founded, in a great measure, upon the civil law. It partly consists of statute law; but many of the ancient statutes never having been enforced, the chief rule of this sort arises from the decisions of the session, which are carefully preserved and published, and afford precedents, generally deemed unexceptionable. Of common law there is hardly a trace, while the civil and canon laws may be said to form the two pillars of Scottish judicature. The modes of procedure have, however, the advantage of being free from many of those legal fictions, which disgrace the laws of some other countries. The inferior courts are those of the sheriffs, magistrates, and justices of the peace. Under the hereditary jurisdictions, happily abolished, the peers, and other great men, maintained a power, almost absolute, over their tenants and followers, so that there was no law but the will of the master, and the cities alone could be deemed seats of freedom.

Population.] The population of Scotland, in 1755, was at 1,265,380; according to the documents furnished by Sir J. Sinclair's statistical account, the numbers in 1798, were 1,527,892; and by the government enumeration in 1801, the inhabitants appeared to amount to 1,604,826. The increase in 46 years was 339,446, or a little more than 26 and $\frac{1}{2}$ per cent.

The army, navy, revenues, political importance, and relations of Scotland, are now inseparably intermingled with those of England.

Manners and Customs.] The manners and customs of the Scots begin to be much assimilated with those of the English. In their religious ceremonies, attending baptism and marriages, there are variations arising from the Presbyterian form which does not admit of god-fathers or god-mothers, but renders the parents alone answerable for the education of the child. The clergyman does not attend at funerals, nor is there any religious service, but generally great decency. Among the lower classes the funerals are generally far more numerously attended than in England; nor is black an indispensable colour of dress on such occasions.

In the luxuries of the table the superior classes rival the English; several national dishes, formerly served up at the best tables, and originating from the French cooking, in the reign of Mary, being now vulgar or neglected. The diet of the lower classes passes in a gradual transition from the north of England. The chief food is *parich*, or thick pottage, formed with oatmeal and water, and eaten with milk, ale, or butter; in a hard lumpy form it is called *brose*. With this the laborer is generally contented twice or thrice in the day, with a little bit of meat for Sunday; nor does he repine at the bacon of the English poor, there being a theological antipathy to swine, which also extends to eels, on account of their serpent-like form.

The sobriety of the lower classes is in general exemplary; and the Scottish manufacturer or laborer, instead of wasting his week-

ly gains at an ale-house, is ambitious to appear with his family in decent clothes on Sundays and other holidays. This may be regarded as a striking characteristic of the Scottish peasantry, who prefer the lasting décencies of life to momentary gratifications. To this praise may be added, that of intelligence, arising from the diffusion of education, which is such, that even the miners in the south possess a circulating library.

The houses of the opulent have been long erected upon the English plan, which can hardly be exceeded for interior elegance and convenience. Even the habitations of the poor have been greatly improved within these few years, and instead of the thatched mud hovel, there often appears the neat cottage of stone, covered with tile or slate.

The dress of the superior classes is the same with that of the English. The gentlemen in the Highlands, especially in the time of war, use the peculiar dress of that country. Among the other classes, the Scottish bonnet is now rarely perceived, except in the Highlands; it was the usual covering for the head all over Europe, till towards the end of the sixteenth century, when the hat, formerly only worn in riding or hunting, came into general use.

The amusements of the rich are on a parallel with those of the English; but those of the peasantry have several diversities, which the reader may, perhaps, best learn from the poems of Burns. That of *curling* consists in rolling large stones, with iron handles, upon the ice, towards a fixed mark, a healthy and favourite diversion in the winter. The English quoits are supplied by *penny stanes*, round flat stones, which are tossed in the same manner. Two exquisite poems of Mr. Burns, his *Halloween*, and his *Cotter's Saturday Night*, will convey more information concerning the amusements, superstitions, and manners, of the Scottish peasantry, than the longest and most animated detail.

Language.] The Scottish language falls under two divisions, that of the Lowlands consisting of the ancient Scandinavian dialect, blended with the Anglo-Saxon; and that of the Highlands, which is Irish. The Lord's prayer, in the most ancient language of the Lowlands, would be as follows :

1. Uor fader quhilk beest i Hevin. 2. Hallowit weird thyne nam. 3. Cum thyne kingrik. 4. Be dune thyne wull as is i Hevin sva po yerd. 5. Uor dailie breid gif us thilk day. 6. And forleit us uor skaiths, as we forleit them quha skath us. 7. And leed us na intil temptation. 8. Butan fre us fra evil. Amen.

The islands of Orkney were seized by the Norwegians, in the ninth century, and the inhabitants retained the Norse language till recent times, when they began to speak remarkably pure English. Chamberlayne has given the Lord's prayer in their ancient dialect :

1. Favor ir i chimre. 2. Helleur ir i nam thite. 3. Gilla cos-dum thite cumma. 4. Beya thine mota vara gort o yurn sinna gort i chimrie. 5. Ga vus da on da dalight brow vora. 6. Firgive vus sinna vora sin yee firgive sindara mutha vus. 6. Lyve us ye i

tuntation. 8. Min delivera vus fro olt ilt. Amen: or, On sa meteth vera.

In the Erse, or Irish, of the Highlands, the same supplication runs thus :

A n' Athair ata air Neamh. 1. Gu naamhaicheadh Tinn. 2. Tigeadh do Rioghachd. 3. Deanthar do Thoil air an Talmal mar a nitheair air Neamh. 4. Tabhair dhuinn an diu ar n Aran Iaitheil. 5. Agus maith dhuinn ar Fiacha amhail mar mhaithmid d'ar luekdfia chaibh. 6. Agus na leig am buaireadh sinn. 7. Ach saor sinn o Ole. Amen.

Literature.] The literature of Scotland recompenses for its recent origin by its rapid progress and extensive fame. The country that produced Buchanan in the sixteenth century, could not, in the twelfth, boast of one native writer.

Yet, it must not be forgotten, that in this dark period, on the sacred ground of Hyona, flourished several respectable Irish writers, who are also classed among the apostles of religion and learning in England; such were Columba, who converted the northern Caledonians, and his biographers, Cuminius and Adomnan, the latter the friend of Bede. Among the Strathclyde Welch may be named Patrick, in his turn the apostle of Ireland.

One of the earliest native writers is Thomas of Erceldon, called the Rimer, who flourished about the year 1270, and wrote a metrical romance, called Sir Tristram, now unfortunately lost. John Barbour, Archdeacon of Aberdeen, wrote his poem on the actions of Robert I. in the year 1375. At the same time flourished John Fordun, the father of Scottish history. James I. of Scotland, wrote some excellent poems early in the fifteenth century; and he was followed by Holland, and Henry the Rimer. In the end of that century arose Dunbar, the chief of the ancient Scottish poets; and, in the beginning of the next, Gawin Douglas and David Lindsay. The Scottish muse continued to warble till the middle of the seventeenth century, when religious fanaticism extinguished all the arts and sciences, but not before Drummond had wove his web of Doric delicacy. In more modern times the names of Thompson, Blair, Armstrong, Beattie, Burns, &c. are universally known.

The other departments of science are of yet more recent cultivation in Scotland; even theology seems unknown till the beginning of the sixteenth century; and of medicine there is no trace till the seventeenth: while now Edinburgh ranks among the first medical schools of Europe. Natural philosophy and history were totally neglected till after the Restoration; yet Scotland can now produce able writers in almost every branch, and equal progress has been made in moral philosophy. Among the new departments of literature in which the Scottish authors have been unsuccessful, may be named epic poetry, comedy, and the critical illustration of the classics.

Education.] The mode of education pursued in Scotland is highly laudable, and to judge from its effects is, perhaps, the best practical system pursued in any country in Europe. The plan which is followed in the cities is nearly similar to that of England,

either by private teachers, or at large public schools, of which that of Edinburgh is the most eminent, and may be traced from the sixteenth century. But the superior advantage of the Scottish education consists in every country parish possessing a schoolmaster, as uniformly as a clergyman; at least the rule is general, and the exceptions rare. The schoolmaster has a small salary, or rather pittance, which enables him to educate the children at a rate easy and convenient, even to indigent parents. In the Highlands the poor children attend to the flocks in the summer, and the school in the winter. There is no country on the globe, except New-England, in which the education of the poor is so universally attended to.

Universities.] The universities of Scotland, or rather colleges, (for an English university includes many colleges and foundations,) amount to no less than four, three on the eastern coast, St. Andrew's, Aberdeen and Edinburgh; and one on the western, that of Glasgow.

The university of St. Andrew's was founded by Bishop Wardlaw, in the year 1412; but as it is now of small importance in the proximity of that of Edinburgh, it would be a patriotic measure to transfer it to the Highlands. That of Glasgow was founded by Bishop Turnbull, in the year 1453, and it has produced many illustrious professors and able students. The late Mr. Anderson, professor of natural philosophy, founded an institution to promote the knowledge of natural philosophy and history, and more especially the application of these sciences to the useful purposes of commerce and manufactures.*

The third university, that of Aberdeen, was founded by Bishop Elphinstone, in the year 1500, and it has always supported its high character and intentions. In the year 1593, George Keith, fifth Earl Marshall, founded a college at Aberdeen, being the only Scottish nobleman who can claim that high honor. The last, not least, is that of Edinburgh, founded by James VI. in 1580; and the bare enumeration of its illustrious professors and writers would occupy too much space for the present plan. The buildings being mean and confined, the foundation of a new edifice was laid in 1789, and, it is hoped, will soon be completed on the magnificent plans adjusted by Adams.

Cities and Towns.] The chief cities and towns in Scotland must now be considered. Edinburgh, the capital, is comparatively of modern name and note, the earliest hint that can be applied to it, occurring in the *Chronicon Pictorum*, about the year 955, where mention is made of a town called Eden, as resigned by the English to the Scots, then ruled by Indulf. Holyrood house was the foundation of the first David.

The population of Edinburgh, including the port of Leith, was, in 1678, computed at 35,500; in 1755, at 70,430; and in 1791, at 84,886.†

* *Garnet's Tour*, ii. 193.

† *Statist. Account*, vi. 564.

The whole number of inhabitants in the old and new town of Edinburgh together with the suburbs and the sea ports of north and south Leith were found by actual enumeration in 1801 to amount to 82,560.*

The arrivals and clearances at Leith Harbor, exceed the number of 1700 vessels of various descriptions. Of these 165 belong to the town. The commerce has been stated at half a million annually.

The houses in the old town of Edinburgh, are sometimes of remarkable height, not less than thirteen or fourteen floors, a singularity ascribed to the wish of the ancient inhabitants, of being under the protection of the castle. This part of the city stands on the ridge of a hill, gradually descending from the lofty precipice on which the castle is situated, to a bottom, in which stands the palace of Holyrood-house. Adjacent to this edifice, is a park of considerable extent, replete with mountainous scenery; for the basaltic heights of Arthur's seat, and Salisbury crags, are within its precincts. The new town of Edinburgh is deservedly celebrated for regularity and elegance, the houses being all of free-stone, and some of them ornamented with pillars and pilasters.

There are several public edifices in Edinburgh, which would do honor to any capital; among such may be named the castle, the palace, the principal church, Heriot's hospital, register office, the new college, and several buildings in the new city.† There is an elegant bridge, reaching from the hill on which the ancient city stands, to the elevated side of the new town. Another bridge passes in a line with the former, towards the south, over a street called the cow-gate: and an artificial mound extends from the western part of the ridge to the opposite hill. The environs of Edinburgh are singularly pleasing and picturesque. On the north is an elevated path, leading to the harbor of Leith: on the east are Musselburgh and Dalkeith, rural villages, watered by a beautiful stream. On the south, Pentland hills; and towards the west, the rivulet Leith, and banks of romantic variety.

The second city in Scotland is Glasgow, of ancient note in ecclesiastical story, but of small account in the annals of commerce, till the time of Cromwell's usurpation.‡ The population of Glasgow, in 1755, was computed at 23,546, including the suburbs; the number in 1791, was estimated at 61,945; and the amount of the enumeration in 1801, was 77,385. The ancient city was rather venerable than beautiful, but recent improvements have rendered it one of the neatest cities in Scotland. Its western situation exposes it to frequent rains, a disadvantage recompensed by its favorable position for commerce with America and the West Indies. Its commerce has arisen to great extent since the year 1718, when the first ship that belonged to Glasgow crossed the Atlantic.§ The number of ships belonging to the Clyde, in 1790, was 476, the tonnage 46,581; but before the American war, it was

* Abstract of the answers and returns, &c. P. II. † Denholme's Glasgow.
† Arnot's Edinburgh. Kincaid's do. § Statist. Acc. v. 498.

supposed to have amounted to 60,000 tons. Though the manufactures scarcely exceed half a century in antiquity, they are now numerous and important.* That of cotton in 1791, was computed to employ 15,000 looms; and the goods produced, were supposed to amount to the yearly value of 1,500,000*l.* the manufacturers of linens, woollens, &c. are far from being of similar consequence. The ancient cathedral of Glasgow survived the reformation, when the other Scottish edifices of that denomination sunk into ruins. Two convenient bridges are thrown over the Clyde. The environs of Glasgow present little remarkable.

Next in eminence are the cities of Perth and Aberdeen, and the town of Dundee. Perth is an ancient town, supposed to have been the Victoria of the Romans. It is pleasantly situated on the western bank of the river Tay; and has been known in commerce since the thirteenth century, but at present the trade is chiefly of the coasting kind, Dundee possessing a more advantageous situation for foreign intercourse. Linen forms the staple manufacture, to the annual amount of about 160,000*l.* There are also manufacturers of leather and paper. Perth displays few public edifices worth notice. Inhabitants, about 23,000. There is a noble bridge, of recent date, over the Tay, and the environs are interesting, particularly the hill of Kinnoul, which presents singular scenes, and many curious mineral productions.

About 18 miles nearer the mouth of the Tay, stands Dundee, in the county of Angus, a neat modern town. The firth of Tay is here between two and three miles broad; and there is a good road for shipping to the east of the town, as far as Broughty-castle. On the 1st of September 1651, Dundee was taken by storm by general Monk; and Lumisden, the governor, perished amidst a torrent of bloodshed. The population is, however, now equal to 26,084; the public edifices are neat and commodious. In 1792, the vessels belonging to the port, amounted to 116, tonnage 8,550. The staple manufacture is linen, to the annual value of about 80,000*l.* canvass, &c. about 40,000*l.* Colored thread also forms a considerable article, computed at 33,000*l.* and tanned leather at 14,000*l.*†

Aberdeen first rises to notice in the eleventh century, and continued to be chiefly memorable in ecclesiastical story. In the fourteenth century it was destroyed by Edward III. of England. The population in 1795 was computed at 24,493, and in 1801 it amounted to 27,500. Though the harbor be not remarkably commodious, it can boast a considerable trade, the chief exports being salmon and woollen goods. In 1795, the British ships entered at the port, were 61, the foreign five; and the British ships cleared outwards, amounted to 28. The chief manufactures are woollen goods, particularly stockings, the annual export of which is computed at 123,000*l.* The coarse linen manufacture is not of much account, but the thread is of esteemed quality.

The other chief towns of Scotland shall only be briefly mentioned, beginning with the south east part of the kingdom. Berwick

* Statist. Acc. v. 502.

† Ibid. Acc. viii. p. 20*l.* &c.

is a fortified town of some note, and carries on a considerable trade in salmon. The vessels built at this port are constructed on excellent principles.

Jedburgh, on the river Jed, which descends from the Cheviot hills, is chiefly remarkable for the beautiful ruins of an abbey, founded by David I. Present number of inhabitants 3,834.

Dumfries stands on a rising ground, on the eastern banks of the Nith, and contains 7,288 inhabitants.

Ayr, in the S. W. of Scotland, is situated on a sandy plain, on a river of the same name ; the chief trade is in grain and coals ; and a few vessels are built. Inhabitants 5,492. Kilmarnock has a population of 8,079. Irvine has 4584.

Lanark stands in a most picturesque country, near the celebrated falls of the Clyde. It was only noted for its academy, under the management of Mr. Thompson, brother-in-law of Thomson the poet, till the recent cotton manufacture, and other erections by the patriotic Mr. Dale, rendered this town still more worthy of attention. Inhabitants 4,692. Hamilton in the same shire contains 5,908 souls.

Greenock and Port-Glasgow, are considerable towns, which have arisen to celebrity, by sharing in the trade of Glasgow. Greenock contains 17,458 inhabitants ; Port-Glasgow about 3,865. Paisley, in the same county, is celebrated by its manufacture of muslin, lawns, and gauzes, to the annual amount it is said, of 660,000/. The population amounts to 31,179. Dumbarton, on the opposite shore of the Clyde, contains about 2,541 souls, and is also subservient in the manufactures of Glasgow.

Sterling is rather remarkable for its commanding and truly royal situation, than for its industry. The inhabitants amount to 5,256. Between Sterling and Edinburgh stands Boness, formerly called Borrowstowners, in the midst of collieries and salt-works : the harbor is good and there are 2,790 inhabitants. Falkirk in the same shire contains 8,838 souls ; and St. Nenian's 6,849.

The county of Fife contains many towns, some of which were in a more flourishing situation, when Scotland carried on a considerable intercourse with France. Dunfermline is a pleasant town, containing 9,980 inhabitants, and carries on a considerable manufacture of diapers. There are ruins of a palace, the royal residence in the time of Malcolm III. St. Andrews has 4,203 ; it is chiefly remarkable for its ruined cathedral. Dysart contains 5,385.

Forfar, in Angus, contains 5,165 souls, and the linen manufactures deserve mention.

Dunkeld is of venerable and picturesque fame, but its linen manufactures are inconsiderable. Brechin contains 5,466 people : its products are linen, cotton, and tanned leather. Montrose has a population of 7974, and a few manufactures ; the buildings are mostly modern and neat.

The county of Mearns presents no town worth mention. Peterhead, in Aberdeenshire, contains about 2000 souls. It has a min-

eral spring, and carries on some trade with the Baltic. Frazerburgh, near the promontory of Kinnaird Head, has also a good harbor. Inhabitants 2,215.

Portsoy is a sea-port town, peopled with about 2000 souls. In the neighborhood, are the rocks well known to mineralogists, containing elegant granites of different kinds, serpentines and steatites, with their usual concomitants, asbestos and amianthus.

Elgin, the capital of the county of Moray, boasts of the remains of an elegant cathedral, and contains 4,345 inhabitants.

Inverness is an ancient and flourishing town, the capital of the northern Highlands. The population equals 8,732. The chief manufactures are ropes and candles. An academy has lately been founded here on an excellent plan.

The few towns further to the north are of little account. Port Rose has only 800 souls; but Cromarty has 2,208, a small manufacture of coarse cloth, and some coasting trade in corn, thread, yarn, nails, fish and skins. Dingwall contains 1,418 souls, and a small linen manufacture. Tain has 2,277 inhabitants. Dornoch was once the residence of the bishops of Caithness: population 2372.

After a dreary interval Wick occurs, the last town on the eastern coast; the inhabitants, 3,986, chiefly deal in cod and herrings.

Thurso, on the northern shore, fronting the Orkneys, has manufactures of woollen and linen. Population 3,628.

Hence there is a lamentable void along the western half of Scotland, till we arrive at Inverary, in Argyleshire, the foundation of the noble house of Argyle, after passing a space of about 160 miles, where only a few scattered hamlets can be found. Inverary is a neat and pleasant town, of about 1000 souls; there are manufactures of linen and woollen, and a considerable iron work. The ore is brought from the west of England, and is smelted with charcoal from the woods of Argyleshire.

In the same county is Campbeltown, a royal borough, in the southern part of the peninsula of Cantire. The trade is considerable, as it is the general resort of the fishing vessels; and the inhabitants amount to 7,093. The harbor is excellent, in the form of a crescent, opening to the east, in front of the island of Arran. About fifty weavers are employed in the cotton manufacture.*

Inland Navigation.] The most remarkable inland navigation in Scotland, is the excellent and extensive canal from the Forth to the Clyde, commenced in 1768, from a survey by Smeaton four years before.

"The dimensions of this canal, though greatly contracted from the original design, are much superior to any work of the same nature in south Britain†. The English canals are generally from three to five feet deep, and from twenty to forty feet wide, and the lock gates from ten to twelve feet; but they answer the purpose of inland carriage from one town to another, for which alone they were designed. The depth of the canal between the Forth and Clyde is seven feet; its breadth at the surface fifty six feet;

* Statist. Account, X. 552.

† Phillips, 276.

the locks are seventy five feet long, and their gates twenty feet wide. It is raised from the Carron by twenty locks, in a tract of ten miles, to the amazing height of 155 feet above the medium full sea mark. At the twentieth lock begins the canal of partition on the summit, between the east and west seas; which canal of partition continues eighteen miles, on a level, terminating at Hamilton-hill, a mile N. W. of the Clyde, at Glasgow. In some places the canal is carried through mossy ground, and in others through solid rock. In the fourth mile of the canal there are ten locks, and a fine aqueduct bridge, which crosses the great road leading from Edinburgh to Glasgow. At Kirkintullock, the canal is carried over the water of Logie, on an aqueduct bridge, the arch of which is ninety feet broad. There are in the whole eighteen draw bridges, and fifteen aqueduct bridges, of considerable size, besides small ones and tunnels."

The supplying the canal with water, was of itself a very great work. One reservoir is above twenty four feet deep, and covers a surface of fifty acres, near Kilsyth. Another, about seven miles north of Glasgow, consists of seventy acres, and is banked up at the sluice, twenty-two feet.

The distance between the Firths of Clyde, and Forth, by the nearest passage, that of the Pentland Firth, is 600 miles, by this canal scarcely 100. On the 28th of July 1790, the canal was completely open from sea to sea, when a hogshead of the water of Forth was poured into the Clyde, as a symbol of their junction. The length of the canal is precisely thirty-five miles, and no work of the kind can be more ably finished.

Manufactures and Commerce.] The general commerce of Scotland, though on a smaller scale, and with smaller capitals, is in most respects similar to that of England, and shares in the national prosperity. That of the capital, through Leith its port, has been estimated, as we have seen, at half a million yearly. The chief exports are linen, grain, iron, glass, lead, woollen stuffs, soap, &c. &c. The imports are wines, brandy; and from the West Indies and America, rum, sugar, rice, indigo. Glasgow exports cottons of all kinds, muslins, lawns, gauzes, &c. glass, stockings, earthen ware, cordage, &c. candles, soap, iron, leather, &c. &c. The chief imports are tobacco, sugar, rum, and cotton, from the West Indies; Irish beef, butter, and linen; wines from Portugal, and other countries.

The herring and salmon fisheries on the coast, the whale fishery in Greenland and Davis' Straits, and the cod fishery on the banks of Newfoundland are productive of great wealth to Scotland, and have met with the direct patronage of the government. The exports of Scotland in 1800 amounted to £ 2,346,069; in 1805 to £ 2,504,867; and in 1809 to £ 4,383,100. In 1805 the trade employed 2,581 vessels, amounting to 210,295 tons, and 15,160 seamen.

The annual amount of the *linen manufactures* is said to be £ 750,000. They have been much injured of late by the rivalry of Ireland. Of woollens, *Scotch carpets*, cheap, neat and dura-

ble ; caps, and stockings form the chief branch. The thread manufacture of Scotland is uncommonly excellent. The quantity of ardent spirits distilled in

1708		50,844	gallons.
1760	{	145,460	
1784	{	268,503	
1791		1,696,000	

The iron manufactures, particularly that at Caron, deserve also to be enumerated among the chief national advantages. In 1763, there were 396 four-wheeled carriages, and 462 two-wheeled, entitled to pay duty. In 1790, there were 1427 of the first kind, and 643 of the last.



CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Climate and Seasons.] THE climate of Scotland is such as might be expected in a latitude so remote, and a country so mountainous. In the eastern parts, there is not so much humidity as in England, as the mountains on the west arrest the vapors from the Atlantic. On the other hand, the western countries are deluged with rain, an insuperable obstacle to the progress of agriculture. Even the winter is more distinguishable by the abundance of snow, than by the intensity of the frost; but in summer the heat of the sun is reflected with great power in the narrow vales between the mountains. These observations chiefly apply to the north and west. In the east and south, the climate differs but little from that of Yorkshire; and corn sometimes ripens in the vales of Moray, as early as in Lothian.

Face of the Country.] The face of the country is in general mountainous, to the extent, perhaps, of two thirds; whence the population is of necessity slender, in comparison with the admeasurement. But the name of Highlands is more strictly confined to Argyleshire, the west of Perthshire, and of Inverness; and the entire counties of Ross, Sutherland, and Caithness. In proceeding from the south east, the entrance into the Highlands near Dunkeld, is very impressive, there being a considerable tract of plain, just before what may be termed the gates of the mountains. Even the eastern parts have little of uniform flatness, but are sweetly diversified with hill and dale. The rivers in general are remarkably pure and transparent, and their course rapid. The rich roughness of an English prospect, diversified with an abundance of wood, even in the hedge rows, is in Scotland rarely visible;

whence the nudity of the country makes a strong impression on the stranger. But the laudable exertions of many of the nobility and gentry, who plant trees by millions, will soon remove this reproach.

Soil and Agriculture.] For a minute account of the various soils that prevail in Scotland, and the different modes of agriculture, the reader must be referred to the Statistical Accounts, published by Sir John Sinclair. The excellence of the English agriculture, has justly entitled it to an imitation almost universal. But this advantage is of recent date ; and, for a long period of time, Scotland was remarkable for producing the best gardeners and the worst farmers in Europe.

Rivers.] The three chief rivers of Scotland, are the Forth, the Clyde, and the Tay. The chief source of the Forth is from Ben Lomond, or rather from the two lakes, Con and Ard : the stream of Goudie soon joins it from the lake of Menteith ; and the river Teith, fed by the lakes Ketterin, Lubnaig and others, swells the Forth to a noble stream, about four miles above Stirling.

The Clyde is said to issue from a hill in the S. E. corner of Tweeddale, called Arrik Stane, which is undoubtedly the chief source of the Tweed, and one source of the Annan : but the Clyde has a more remote source in Kirshop, or Dair water, rising about six miles further to the south, in the very extremity of Lanarkshire ; and the true source of the Annan seems to be Loch Skeen, in the county of Selkirk. However this be, the Clyde passes through Crauford Moor, leaving the range of Leadhills on the left, and winding under the lofty hill of Tinto, near Symington, pursues a northerly course, till about two miles to the south of Carnwaith, when it resumes its chief westerly direction.

The principal source of the Tay, is the lake of the same name, or the river may be traced to the more westerly sources of the Attrick and the Dochart, and the smaller stream of Lochy ; which fall into the western extremity of Loch Tay. Soon after this noble river issues from the lake, it is joined by the river Lyon ; and, at no great interval, by the united streams of the Tarf, the Garry, and the Tumel, the last, a rapid and romantic river. The streams of Ericht and Ilay, swell the Tay, about nine miles to the north of Perth ; after passing which city, it receives the venerable stream of the Ern, and spreads into a wide estuary.

Next in consequence and in fame, is the Tweed, a beautiful and pastoral stream, which, receiving the Teviot from the south, near Kelso, falls into the sea at Berwick.

The Scottish Tyne is an inconsiderable river, which runs by Haddington.

In the south west, the Annan contributes largely to the Firth of Solway, but no town worth mentioning adorns its banks. Dumfries stands upon the Nith, a river of longer course than the Annan, and marked at its estuary by the ruins of Caerlavroc castle, an important fortress in ancient times. The river Ore, and that recently styled Kirkudbright, anciently and properly called the Ken, (whence is derived the title of Kenmure,) and the Fleet, are

surpassed by the river Cree or Crief; which formerly split Galloway into two divisions, and which opens into the noted bay of Wigton.

The rivers of Ayrshire, flowing into the grand estuary of the Clyde, are of inconsiderable size.

To the north of the estuary of Forth, occurs the Eden, which, after watering the royal park of Falkland and Coupar, the county town, meets the ocean, about two miles to the north of St. Andrews.

To the north of Tay are the South Esk, which passes by Brechin and Moutrose; and the North Esk, a less considerable stream.

In the county of Kincardine there is no river of consequence. But the Dee is a considerable and placid stream, issuing from the mountains Scairsoch, and pursuing a due easterly course to Aberdeen. The Don runs almost parallel, a few miles to the north, joining the sea about two miles from Aberdeen, after passing Old Aberdeen, or rather, in the old orthography, Aberdon.

A few miles to the north of the Don, the river Ythan falls into the German ocean, a stream formerly celebrated for its pearl fisheries, of which some relics remain. The Uggie is the last stream of any consequence in Aberdeenshire.

The following rivers direct their course to the north. The Devon joins the sea at Banff. The Spey is a grand impetuous river, rising from a small lake, called Loch Spey, in the vicinity of the high mountain of Corriarok, near Fort Augustus, whence it rolls to the south east, amid mountainous wilds, till it suddenly turns to its fixed direction, the north east, being, perhaps, upon the whole, the most considerable Alpine river in Scotland.

The water of Lossie is only remarkable, as it washes the venerable remains of Elgin; but Findorn, which runs by the Forres of Macbeth and Shakespeare, is a considerable torrent.

The Ness, issuing from the lake so called, and the Beuly, conspire to form the large estuary, called Murray Firth; while that of Cromarty is formed by the Grady, the Conon, and other streams.

The estuary of Dornoch is formed by a river which issues from Loch Shin, by the Caran, and by the intermediate stream, called Okel.

The other streams in the furthest north of Scotland, are unhappily of small consequence. The water of Thurso, and that of Naver, are the chief. In the north-west extremity are the Strathmore, the Strathbeg, and the Durness, which enters the sea to the east of the stupendous promontory of Cape Wrath, now modernized Wrath.

On the west of Scotland there is no river of any moment; but the defect is compensated by numerous lakes, or rather creeks, of which the most considerable are Laxford, Calva, Ennard, and that of Broome, which forms a noble bay, studded with islands, nearly parallel with the bay of Dornoch. On its shore is the projected settlement of Ullapool, to which every patriot must wish success. Next are the En and the Gare, the Torridon, the Kessern, and oth-

ers of smaller note. Argyleshire exhibits the Sunart, a long inlet, which terminates at Strontian; and the Linney, extending to Fort William. The Etif is impeded by a singular cataract, at its entrance into the sea. The small inlet of Crinan attracts observation, by the promised canal; and the list is closed by Loch Fyne, and Loch Long, forming vast inlets from the estuary of Clyde.

Lakes.] Among the lakes of Scotland, the chief in extent and beauty is that of Lomond, studded with romantic islands, and adorned with shores of the greatest diversity. The isles are supposed to form part of the Grampian chain, which here terminates on the west. The depth of this lake in the south, is not above twenty fathoms; but the northern creek, near the bottom of Ben Lomond, is from sixty to eighty fathoms. This lake is thirty miles long, and in some places eight or nine broad. Its surface contains upwards of 20,000 acres of water. It has about thirty islands scattered over it, eleven of considerable size. These and the country bordering on the lake are distinguished for their beauty and fertility. The Endrick falls into it on the south east, and its waters are discharged through the Leven into the Firth of Clyde. It abounds with delicious salmon and trout.

The country from *Moray-Firth* to the sound of Mull is a continued valley running in a direction from N. E. to S. W. It is called *Glen-more-na-h'al-abin*, or the *Great glen of Caledonia*, and is almost filled with extensive lakes. A chain of lakes and rivers passing through it almost insulate the northern division of Scotland. This chain consists of Loch Linne, Lochy river, Loch Lochy, Land, Lochn Oich, Oich river, Loch Ness, and Ness river. This distance is divided as follows :

Miles.		Miles.	
Loch Linne	40	Loch Oich	4
River Lochy	17	River Oich	5
Loch Lochy	10	Loch Ness	22
Land	2	River Ness	8
			—
			98

Loch Linné is a deep narrow arm of the sea. At Fort William it turns to the N. W. and is called Locheil. The whole length of Loch Lochy in its windings is fourteen miles, and its breadth from one to two. Loch Ness is 22 miles long, from 1 to $2\frac{1}{2}$ broad, and from 60 to 135 fathoms deep. Its shores are remarkably bold, and a ship of the line might sail in any part of it. Its waters abound with fine trout, and are never frozen. The high hills, which environ it, present a delightful view of woods, pasture, cultivated lands, cascades, and rugged and broken precipices.

Loch Awe in Argyleshire is thirty miles long and from one to two broad. It contains many islands, on one of which are the ruins of an ancient castle. At the N. E. extremity rises Ben Cruachar to the height of 3,390 feet above its surface, from the top of which descends the river that forms the lake. The scenery of this lake

and its shores is remarkably picturesque. Its waters abound with salmon, trout, and eels ; and fall into Loch Etive an arm of the sea at Bunav, a place celebrated for its salmon fishery.

Loch Shin, in the county of Sutherland, is 20 milss long, and from one to two broad. Its waters flow through the river Shin six or eight miles, over several cascades to the head of the Firth of Dornoch.

Loch Ericht in Perthshire, in the very heart of the Grampians, is 24 miles long and scarcely one broad. It is encompassed on all sides by lofty mountains and rugged cliffs of the most tremendous aspect. Cultivation is a stranger to its banks, which are occupied by heath and a few straggling birches and alders. Its outlet joins the Tay.

Loch Tay, in Braidalbin in Perthshire, is 15 miles long, and from one to two broad. Its depth is from 15 to 100 fathoms. Its banks on both sides are fruitful and populous, and finely diversified by the windings of the coasts and the various appearances of the mountains. Its waters like those of Lomond, Ness, and others, are liable to violent and unaccountable agitations. *The Lochay* and the *Dochart* flow into it on the S. W. and the Tay on the N. E. empties its waters into the Firth of Tay.

Loch Archaig in Inverness-shire, 16 miles long, and $1\frac{1}{2}$ broad, of great depth and abounding with trout, empties by the *Archaig* into Loch Lochy, which is only one mile distant.

Loch Laggan, in Invernessss-hire, 15 miles long and $1\frac{1}{2}$ broad, is exceedingly deep with a bold rocky shore and surrounded with woody mountains. On the S. side is the *Coill-More*, or *Great Wood*, the largest remnant of the ancient Caledonian forest. Its waters abound with char and various kinds of trout. They empty through the *Spen*, into Loch Lochy near Fort William.

Loch Rannock in Perthshire, twelve miles long and from one to two broad, empties at its east end through the *Tummel* into the Tay.

Loch Shiel, in Inverness-shire, ten miles long and two broad discharges itself by the *Shiel* into the western sea at *Castle Tioram*.

Loch Leven, in the counties of Kinross and Fife, is twelve miles in circumference. It contains four islands. On the largest of these *St. Serf's* was formerly situated; the ancient priory of *St. Serf*, the monks of which were Culdees. On another are the remains of the *castle of Loch Leven*, formerly a royal residence, in which Mary Queen of Scots was for some time kept close prisoner after the battle of Pinkie. This lake abounds with pike, perch, eels, char, and trout. Its waters pass through the *Leven* a course of twelve or fourteen miles into the Firth of Forth.

Mountains.] But the chief distinctive feature of Scotland consists in its numerous mountains, which intersect the country in various directions. In the south-west, the ancient province of Galloway presents an extensive assemblage of hills, which seldom describe any uniform chain. From the bay of Glenluce, which extends towards Loch Ryan ; and thence in a N. E. direction to

Loch Doon, the source of the river of the same name. Other ridges run in various directions, generally north and south, according to the course of the rivers, till we arrive at the Nith, near which is Cruffel, a detached summit of considerable height. According to general Roy, than whom there cannot be a better authority, the mountains of Galloway form a connected chain with those of Cheviot on the N. E.

But the chief elevation of this part of Scotland is that metalliferous ridge in its very centre, called the Lead Hills. The small stream of Elvan conveys particles of gold to the Clyde, and German miners are said to have discovered considerable quantities of that precious metal. The chief summit of this ridge is Hartfell, which, according to some accounts, is 3,300 feet above the level of the sea; but by others 2,582. To the east we find the uniform ridge of Lamermoor, terminating in St. Abb's head. The hills of Pentland, on the south of Edinburgh, are rather picturesque than important. Berwick Law, and the romantic summits in the vicinity of Edinburgh, close the list of the southern hills. The Lead Hills chiefly consist of argillaceous schistus; but the grey granite abounds in the mountains of Galloway. In all, however, the chief portion seems to be calcareous; the summits are round, some verdant, others covered with heath. The red granite, and other grand Alpine rocks, seem here unknown. In the Lothians the calcareous strata support vast masses of whin, trap, and basalt, which extend to the northern shore of the Firth of Forth.

On passing the Forth appears the range of Ochill-hills, more remarkable for their singular agates and calcedonies, than for their height. On the northeast of Aberdeenshire is Mormond, a remarkable solitary summit; whence no mountains of note occur till Inverness, on the west, opens the path to the Highlands. Yet, it must not be forgotten, that from the lofty promontory of Trouphead to Portsoy, extend vast masses of beautiful red granite, interpersed with schorl, and of serpentine with steatites, and other valuable stones. Before leaving the Lowland hills, it may be observed, that the small ridge in Fifeshire, between the Eden and Leven, called Loman hills, consists mostly of hard free-stone, with superincumbent strata of whin and basalt.

The Grampian hills may be considered as a grand frontier chain, extending from Loch Lomond to Stonehaven, and forming the southern boundary of the Highlands, though four or five counties on the northeast of that chain, have, in their eastern and northern parts, the name and advantage of Lowlands. The transition to the Grampians is gradual, the first chain, according to General Roy, consisting of the Sadley-hills on the east, the Ochills in the middle, and Campsy-hills on the west. To the Grampian chain belongs Ben Lomond (3,262;) Ben Ledy (3,009;) Ben More (3,903;) Ben Lawres, the chief summit (4,015;) Shihallion (3,564;) Ben Vorlich (3,300;) and other less important elevations on the east. Mount Battock, in Kincardineshire, is 3,465 feet. Ben Cruachan, in Argyleshire, is a solitary mountain, 3,390 feet above the sea.

Ben Nevis is the highest mountain in Great Britain, being estimated at 4,350 feet above the level of the sea, not much above a quarter of the height of Mont Blanc. It lies in the parish of Kilmailie, in Inverness-shire. It has not hitherto been explored by any mineralogist. On the N. E. side it presents a precipice, nearly perpendicular, and of prodigious height, by some accounts 1500 feet. The view from the summit is grand,* exhibiting most of the western Highlands, from the paps of Jura, to the hills of Cullen, in Skey; on the east it extends to Ben Lawres, in Perthshire, and the river Ness: extent of view about 80 miles. The superior half of the mountain is almost destitute of vegetation.

It would be difficult to divide the remaining mountains of the Highlands into distinct lines or groups; they shall, therefore, be briefly mentioned in the order of proximity. To the N. W. of Ben Nevis is the long mountain of Corriarok, near Fort Augustus, over which a military road has been directed, in a zig-zag direction. From the foot of this mountain arises the rapid river Spey; and other streams run to the west, circumstances which indicate great elevation. About thirty miles to the east rises the mountain Cairngorm (4,060 feet,) or the blue mountain, clothed with almost perpetual snow, and remarkable for quartz of different colors, chiefly the smoaky kind, well known to lapidaries. The other chief mountains in this region are those of Braemar, or Scairsoch, at the source of the Dee; Ben Awn, and many of smaller height, such as Benibourd,† Benachie, &c.

In the second division of the Highlands, which lies beyond Loch Linny and Loch Ness, the mountains are yet more numerous, but not so memorable. The western shore, in particular, is crowded with hills, from the island of Skey to Cape Wrath, while a branch, spreading eastward towards Ord-head (1,250 feet) forms, what are termed by seamen, the Paps of Caithness (1,929 feet.) The chief mountains on the west of Ross-shire, are Ben Chasker, on the south of Loch Broom; and Ben Wevis (3,720 feet.)

On proceeding to the most northern parts of Scotland, the counties of Sutherland and Caithness, first occurs Ben Ormoid; then extends the chain, called the Paps, consisting of the mountains Morben, Scuraben, &c. from which run in a northerly direction, according to the course of the rivers, inferior chains. The N. W. extremity of Scotland presents some pleasant vales toward the sea, and inland that of Dornadilla, and an elevated plain on the west of Loch Loial, called Dirrymore forest:‡ further to the west no names occur, except that of Cape Wrath, and the region is described by an intelligent traveller in the following terms:§

"A wide extent of desert country lay before us, and exhibited a most august picture of forlorn nature. The prospect was altogether immense, but wild and desolate beyond conception. The

* Statist. Acc. viii. 414.

† Always covered with snow, and, perhaps, as Mr. Aikin conceives, higher than Cairngorm. At about the height of 4,000 feet, snow remains all the year in Scotland.

‡ Cordiner's Letter to Pennant, p. 111.

§ Ibid. 104.

mountains presented nothing to view but heath and rock ; between them formless lakes and pools, dark with the shades thrown from prodigious precipices, gave grandeur to the wilderness in its most gloomy forms."

Having thus explained, at some length, the directions and positions of the Scottish mountains, because they constitute the most remarkable feature of the country, and yet have never received due illustration, their constituent parts remain to be briefly examined.* On entering the Highlands, near Dunkeld, the first ridges are alluvial hills of gravel, containing pebbles of micaceous schistus, quartz, and granite. The rocks immediately to the north of Dunkeld are composed of micaceous schistus, penetrated in every direction by veins of quartz. From the junction of the Tay and Tumel, westward to Loch Tay, the northern bound of the vale is of the same substances, sometimes interspersed with garnets. The whole summit of the higher chain is covered with large rounded masses of granite. The southern shores of Loch Tay consist of micaceous schistus, with a few garnets, interrupted about the middle with banks of compact bluish grey lime-stone. The northern shores are similar, but the lime-stone is micaceous. The mountains in Glenlochy are mostly of micaceous schistus, interspersed with garnet; Glen Lyon presents small veins of lead. The vale of Tumel, between Loch Tumel and Loch Rannock, is overspread with rounded fragments of granite and micaceous schistus, but contains granitoid, and some granite. The lower part of Glen Tilt chiefly exhibits micaceous schistus; the upper principally granite and lime-stone.

Such are the more southern parts of the Highlands. In the west, towards Ben Lomond, micaceous schistus also abounds; but that mountain is chiefly of gneiss, and the like features are found in the peninsula of Cantire. In the north of Argyleshire appears the beautiful red granite, which chiefly constitutes the central chain, already indicated; to the north of which first appears micaceous schistus, and afterwards a remarkable course of pudding-stone, extending from Loch Ness to Oban. The mountains in the north have been little explored, but Mr. Jameson tells us, that the coast is chiefly a course of argillaceous sand stone, often appearing in the form of flags, while in some places are masses of breccia, being pebbles of red granite, micaceous schistus and quartz, in arenaceous bases. Mount Scuraben is sand-stone, with a summit of white quartz. Morben, and other mountains in this district, from their white color, seem to be of the same composition. About the Ord of Caithness appear granite and micaceous schistus.

The central and western parts of Sutherland and Ross-shire have not been explored; but it would seem that the west of Sutherland is chiefly primitive lime-stone. The mountains seem to be of granite and micaceous schistus, but often present the singular feature of vast summits formed of white quartz. Near Loch

* Mr. Aikin's Notes.

Broom is found that sort of granite which is best adapted for mill-stones.

Upon the whole it would appear, that the chief, or granitic chain of the Scottish mountains, extends in a S. W. and N. E. direction, from Ben Nevis to Portsoy. In many parts it has sunk or subsided, as is not unusual, but the line is marked by the gradual transitions from lime-stone, and sand-stone, to micaceous schistus, and thence to granite. Ben Nevis, Cairngorm, and other lofty summits, mark this primitive chain. The Grampians, which form the outer skirt of this chain, consist, according to a German mineralogist,* of micaceous lime-stone, gneiss, porphyry, slate, and granite, alternating with each other; and another German says, that the fundamental rock of the country consists of granitic aggregates. The mountains in the S. W. are chiefly schistose, and the granite is grey, and of an inferior kind; but Mr. Williams informs us, that Ben Nevis, and other mountains in that quarter, are composed of elegant red granite, in which the pale rose, the blush, and the yellowish colors, are finely mixed and shaded.† The like granite is found at Portsoy and Trouphead, and is probably continued through the whole chain, the superior height of the region being marked by the extreme rapidity of the river Spey. This tendency of the leading chain is not only marked out by the Grampians, but by that of the islands, and of the grand chain in Norway, which, indeed, seems a continuation of the Scottish chain, and the last, probably contains silver as well as the Scandinavian. The mountains on the north west of the lakes Ness and Linny, are probably only exterior skirts of the same chain, and present the usual declension of micaceous schistus terminating in lime-stone and sand-stone, in the northern parts of Sutherland and Caithness. The islands of Shetland chiefly present micaceous schistus, interspersed with a few masses of granite; and the Orkneys, &c. consist mostly of sand-stone. The western islands may be supposed to be chiefly calcareous. It is remarkable that the space from Inverness to Dunolla, on the west, abounds with pudding-stone, composed of pebbles of quartz, probably washed down from the granitic chain, and afterwards cemented by some unknown process of nature, either by iron or siliceous earth.

General Roy mentions two remarkable features of the Highlands, first the moor of Rannock, a high desert of twenty miles square, on the S. E. of Ben Nevis, a flat uninhabited morass. The second is part of the N. W. coast, extending from Loch Inchard twenty four miles to the south, breadth about ten miles, which presents a most singular appearance, as if mountains had been broken into fragments, interspersed with pools of water.

Forests.] The forests of Scotland are very rare in the proper acceptation of the term; and the *Sylva Caledonia* has long since vanished. The whole county of Selkirk was formerly denominat-

* Kirwan's Geol. Essays, 481.

† Prov. of Moray, Aber. 1798. 8vo. p. 267.

ed Ettric forest. There was also a considerable forest, that of Marr, in the west of Aberdeenshire, where now remains the forest of Abernethy†, extending to Cairngorm. In the county of Sutherland was the forest of Sletadale, on the north of Dunrobin, the seat of the earls of Sutherland; and in the north of the same county, are marked Parff-forest, between Ashir and Dunan; to the south of which were Reay forest, or that of Dirrymore; with those of Dirrymore, and Dirrymena on the north and south of Loch Shin. No other forest occurs till we reach the county of Argyle, which contains Boachiltive forest on the north.

Botany.] Having given a general account of the indigenous plants of England, it will suffice, for the botany of Scotland, to point out the particulars in which the two floras differ, together with the causes of the difference.

The northern part of Britain differs from the southern as to climate, in being colder and more rainy; and as to soil, in consisting chiefly of mountainous, granitic, or micaceous districts, the highest peaks of which are buried in perpetual snow. There are no chalk-hills in Scotland; nor any of that soil which characterises the southern part of the island, and is composed, for the most part, of sand and calcareous marl. We might, therefore, *a priori*, expect to meet with more alpine plants in Scotland than of those which flourish best in a light, chalky soil, and in a mild climate; this is found to be in fact the case. The greater number of vegetable species is the same in both countries; but the warm, moist region of Cornwall, Devonshire, and Dorset; the range of chalk-hills on each side of the valley of the Thames; the dry, sandy tracts of Norfolk, Suffolk, and Cambridge, and the fens of Lincolnshire, contain many plants that are unknown to Scotland; as, on the other hand, the snowy summits of the Grampians, the extensive forests of Badenoch and Braemar, and the bleak, shelterless rocks of the Hebrides, possess many hardy vegetables, which are not to be found in England. South Britain contains a greater number of species peculiar to itself; but those that are similarly circumstanced in the northern part of the island, are of more frequent occurrence, and therefore more characteristic: to the English botanist, Scotland will have more the air of a foreign country than England will to a Scottish naturalist. Amidst the grand romantic scenery of the Highlands the search of the English botanist is continually solicited and repaid by the appearance of plants, either altogether new to him, or which he has been accustomed to consider as the rare reward of minute investigation. In traversing the vast natural forests of birch and pine, although his notice will be first attracted by the trees themselves, in every stage of growth, from the limber sapling to the bare weather-beaten trunks, that have endured the storms of five or six hundred winters, yet the new forms of the humbler vegetables will soon divide his attention; the red and white blossoms of the trailing *Linnaea*, the *Pyrola secunda*, and *uniflora*, *Satyrium repens*, *Ophrys corallor-*

† Mineral King. II. 13.

hiza, and *Convallaria verticillata*, will each attract their share of regard. The moist and shady recesses of the slate mountains are carpeted by the three *Veronicas*, the *Alpina*, the *saxatilis*, and *fruticulosa*. The mountainous districts of granite are peculiarly rich in alpine plants; the ledges and crevices of the rocks are adorned by tufts of the golden cinquefoil, and luxuriant festoons of the *Arbutus alpina*, and *Arbutus uva ursi*, glowing with their scarlet and deep blue berries among their glossy leaves. The cloud berry, and some of the *lichens*, flourish amidst the snow and solitude of the most elevated summits; and afford at the same time shelter and food for the Ptarmigan, almost the only one of our native birds that can inhabit so cold a situation. The Lowlands of Scotland seem to contain no plants which are not found in similar soils in England; the sea coast, however, exhibits two umbelliferous vegetables, the *Ligusticum Scoticum*, and *Imperatoria Ostrethium*, which cannot be met with on the southern shore.

Zoology.] The zoology of Scotland presents little remarkable, as distinct from that of England. The small horses of Galloway seem to have been a primitive breed, and, in diminutive size, are exceeded by those of Shetland. The cattle in Galloway are often without horns, a defect which is supposed to be recompensed by the superior quantity and quality of the milk. The kylies, as already mentioned, are a middle-sized breed from the province of Kyle, and other districts of Ayrshire and Galloway. On the east are found large cattle of various breeds. The sheep are smaller and shorter than those of England; those of Shetland are remarkable for the fineness of the wool, which is, however, interspersed with coarser piles. Goats are not so numerous in the Highlands and Isles as might be expected.

Of wild animals, the wolf has been extirpated in Scotland only since the year 1680. The beaver and the bison formerly were found here. The wild cat is still occasionally found; the other classes correspond with those of England, except that the Roe is still not unfrequent. Among the birds, eagles are not unknown, nor elegant falcons. The shores and islands present numerous kinds of sea-fowl.

Scotland abounds with fish of all kinds, and contributes great supplies to the English market, particularly in lobsters and salmon. The transparent lakes, rivers, and rivulets, present a beautiful variety of fish: on the northern and western coasts are numerous seals. The whale sometimes appears, and the basking shark frequently plays in the western inlets. Pearls are found in the rivers Teith and Ythan, in a large kind of mya, or muscle. Many beautiful zoophites, on the northern shores, have been found and introduced to public notice by Mr. Cordiner.

Mineralogy.] The small quantity of gold found in Scotland has been procured from the Lead-hills, which are mostly composed of coarse slate. None worth mentioning has been met with recently. The silver found in Scotland has hitherto been of little account; the chief mine was that at Alva, which has since only afforded cobalt. Nor can Scotland boast of copper, though a small

quantity was found in the Ochills, near Alva, with silver and cobalt: and it is said that the islands of Shetland offer some indications of that metal. Copper has also been found at Colvend, in Galloway; at Curry, in Lothian; at Oldwick, in Caithness; and Kissern, in Ross-shire.

The chief minerals of Scotland are lead, iron, and coal. The lead mines in the south of Lanarkshire have been long known. Those of Wanlock-head are in the immediate neighborhood, but in the county of Dumfries. Some slight veins of lead have also been found in the western Highlands, particularly Arran. Iron is found in various parts of Scotland; the Carron ore is the most known, it is an argillaceous iron-stone, and is found in slaty masses, and in nodules, in an adjacent coal-mine, of which it sometimes forms the roof. At the Carron-works this ore is often smelted with the red greasy iron ore from Ulverston, in Lancashire, which imparts easier fusion, and superior value. Calamine, or zinc, is also found at Wanlock-head; and it is said, that plumbago and antimony may be traced in Scotland.

But the chief mineral is coal, which has been worked for a succession of ages. Pope Pius II. in his description of Europe, written about 1450, mentions that he beheld with wonder, black stones given as alms to the poor of Scotland. The Lothians and Fife-shire particularly abound with this useful mineral, which also extends into Ayrshire; and near Irvine is found a curious variety, called ribbon coal.

In passing to the less important minerals of Scotland, the new earth originally found at Strontian, and called after the name of the place, deserves the first notice. Fine statuary marble is found in Assynt, and the marble of Tiree ranks among the most beautiful varieties.

Among the precious stones of Scotland are the sapphire, of different shades, from a deep red, to a transparent white, and of equal hardness with the oriental; the topaz, of various hues, generally in hexahedral crystals; the ruby and hyacinth, near Ely in Fifeshire, usually small and of inferior lustre; the emerald and amethyst, frequently to be met with, the latter often very large and beautiful; garnets in many places of the Highlands, large, and frequent; agates and cornelians, abundant, and unrivalled in their variety and beauty; jaspers in almost every district, some of great beauty and value; the chalcedony, in Fifeshire, equal in hardness to the oriental granite; that of Ben Nevis equal in beauty to the Egyptian, and that of Portsoy of the kind called *Moses' Tables*, resembling Hebrew characters on a white ground.

Mineral Waters.] The mineral waters of Scotland are numerous, but none of equal fame with those of England. The chief are Moffat wells in the south, and those of Peterhead in the north.

Natural Curiosities.] Scotland, like other mountainous countries, abounds with singular scenes, and natural curiosities. The beautiful falls of the Clyde, near Lanark, have deservedly excited much attention. The beauties of Loch Lomond have been so of-

ten described, that it is unnecessary to repeat so trivial a theme. The rocks off the coast of Aberdeenshire often assume singular forms of arches and pillars, of which the Bullers of Buchan are the most remarkable ; and the space from Trouphead to Portsoy abounds in uncommon rocks, and singular marine productions.

SCOTTISH ISLES.

The islands that belong to Scotland are numerous and important, and fall naturally into three grand divisions ; the Hebudes,* or Western Islands ; the Orkneys ; and the islands of Shetland.

On passing the conic rock, called Ailsa, towards the north, two beautiful islands adorn the Firth of Clyde, those of Arran and Bute.† The first is about twenty-three miles in length by fourteen in breadth, and has 5,179 inhabitants. The chief place is the village of Ranza ; and Brodie castle is memorable in history. The exports are black cattle and barley.‡ Mr. Jameson has recently published an account of this island, particularly its mineralogy, from which it appears that it is a mountainous region : and Goat-fell is near 3000 feet in height. The southern parts of the island present low and cultivated grounds.

Bute is about eighteen miles in length, and from four to five in breadth ; inhabitants 6,106 ; the chief town is Rothesay, containing 5,231 inhabitants ; and in the vicinity is Mount Stuart, the ornamented residence of the Marquis of Bute, and worthy of the distinguished taste of the noble proprietor. Kingarth, the other town, contains 875 inhabitants. The two Cambrays, lying east of Bute, contain 506 inhabitants.

To the west of the Chersonese of Cantire begin the Hebudes ; or Western Islands, properly so called. The first is Ila, twenty-eight miles in length and eighteen miles in breadth. Ila produces many black cattle, which are exported, and sometimes pass as far as England.§ But the sheep are rare ; small horses are much used, as the country is not very mountainous. This isle belongs to Mr. Campbell, of Shawfield. Inhabitants, 8364. Lead-mines were here discovered in the sand-stone, 1763 ; this lead is, as usual, mingled with silver.

Jura is divided from the last by a narrow sound : it is thirty miles in length, and on an average seven in breadth. It is the most rugged of the Hebudes, which, in general, are mountainous regions. The paps of Jura, a line of conic hills, present a singular appearance ; they are on the western side of the island, and almost bare of vegetation.|| The best crops are potatoes and barley ; and the isle contains abundance of peat. The cattle are small, but the sheep excellent. The noted gulf or whirlpool of Bre-can or Corryvrekan, is on the northern extremity of Jura.¶ Inhabitants 1202.

* This name was corrupted by Rector Boyce, into Hebrides.

† Pennant's Voyage, 168.

§ S. A. xi. 278.

‡ Stat. Account, vol. ix. p. 169.

|| S. A. xii. 318.

¶ Kuox's View, ii. 451.

To the west of Jura are the isles of Oransa and Colonsa; and the strait between them being dry at low water, they may be considered as one island, about ten miles in length. The soil is generally light and arable, producing barley and potatoes. The venerable ruins of the ancient monastery of Canons regular in Colonsa now exist no longer; but those of a curious priory in Oransa still remain.* Inhabitants of both 718. Balnahuaign contains 132 inhabitants, and Scarba and Lurga 79.

The next isle of any consequence is that of Mull, one of the largest of the Hebudes, and surrounded with smaller interesting islands. Mull is about twenty-eight miles in length, by a medial breadth of about eighteen, containing 425 square miles. The population is 8,367.† On the north-east is the new village of Tobermory.

But the most curious objects in the vicinity of Mull, are Icolmkill and Staffa. Hyona, or Icolm-kill, is about three miles long, by one broad, and is venerable, as the primitive seat of Scottish literature and religion, founded by St. Columba in the sixth century. Its history and ruins have been often described; but it may be added, from a recent traveller, that the isle produces beautiful white marble, and large blocks of indurated steatites.

Staffa, about six miles to the north of Hyona, was first introduced to public notice by Sir Joseph Banks. Buchanan has mentioned the isle, but not its grand singularities, its beautiful basaltic columns, and one of the most surprising objects of nature, the vast basaltic cavern, called Au-ua-vine.

Fiuhn Mac Coul's, or Fingal's Cave or Grotto. This cave is on the west side of the island. It is an immense excavation in the side of a mountain of solid rock, the roof of which is arched, and is supported by numberless basaltic pillars of various sizes and heights of 3, 4, 5, 6, and 7 sides, the pentagonal and hexagonal being most numerous. These columns are mostly above 50 feet high. The bottom of the cave is filled with the sea, reaching to the very extremity. In calm weather a boat may sail in safely; but if the waves are agitated in a slight degree, it is inevitably dashed to pieces. Sir Joseph Banks, who visited it in 1772, gives the following as its dimensions:

	Feet Inches.
Breadth of the mouth	53 7
Do. at the farther end	20 0
Height of the arch at the mouth	117 6
Do. at the end	70 0
Length from the pitch of the arch to the farther end	250 0
Height of the tallest columns on the right side of the entrance	45 0
Depth of water at the mouth	18 0
Do. at the farther end	9 0

* Statist. Acc. xii. 327.

† St. Fond, tome ii. p. 89.

A small cave at the farther extremity sends forth an agreeable noise every time the water rushes into it; from which circumstance it has received the name of *Au-ua-vine*, or the *melodious cave*. The light from without is sufficient to illuminate the whole cave, and the air is perfectly free from damp and noxious vapors.

To the N. W. of Mull are the isles of Tirey and Col, the former 11 miles long and $2\frac{1}{2}$ broad, producing a most beautiful marble, of a rose color, penetrated with small irregular crystals of green hornblende, and which the French naturalists have, from the name of the isle called Tirite, no similar marble being anywhere found. Tirey is generally plain and fertile. Population 2,416. Col, on the contrary, is rocky, but has several small lakes, replenished with fish. It is thirteen miles long and three broad. Population 11,622.

Another group consists of Skey, in the Scandinavian styled Skua, and the surrounding isles. Skey is the largest of the Hebudes, being about 50 miles in length, and about 40 in breadth. Inhabitants 17,691; chief exports black cattle and small horses: the land, as usual in the Hebudes, rough and hilly. The houses are chiefly turf, covered with grass. The face of the country wild, heathy, and deluged with continual rains. Skey contains eight parishes. To the south of Skey are the isles Canna, Rhum, Eig, and Muck; and to the N. E. of Skey, Rona, Raza and Scalpa. The population of these four, Canna, Rhum, Eig, and Muck, is 1,339. The other isles in this group offer little memorable. Canna and Eig contain basaltic pillars, and in the former is Compass hill, which strongly affects the needle.

It now remains to give some idea of the exterior chain of the Western Isles, forming, as it were, a barrier against the Atlantic. Two small and remote isles have attracted considerable notice. The first is that of Rona, about twelve leagues to the N. W. of Cape Wrath, and about thirty leagues W. from the Orkneys. This little isle, with its companion Suliska, or Bara, has almost escaped from the Scottish maps, being little known, and rarely visited. In the last century, Sir George M'Kenzie, of Tarbat, afterwards Earl of Cromarty, drew up a short account of Rona, from the oral information of inhabitants, at that time consisting only of five families.*

The small isle of Hirta, or St. Kilda, must have attracted much notice, even in Lesley's time, for in his map he has represented it as about six times the size of Skey, while in truth it is only three miles long and two broad. St. Kilda is about 60 miles to the west of North Vist, and 140 from Scotland; and has been repeatedly described; the singular and simple manners of its inhabitants have excited considerable attention. Its shores are every where, except in the bay, a perpendicular face of rock of prodigious height. Inhabitants about 300.

Having thus briefly mentioned these remote and little visited isles, the plan here followed must be resumed by some account

* Monro's Descript. of the W. Isles, in 1549. Edin. 1774. Duodecimo, p. 63. The Stat. Acc. xix. 271, adds nothing.

of Lewis, the principal island of the western chain. It is about 60 miles in Length, by twenty in breadth. The face of the country consists of a heathy elevated ridge full of morasses from the S. W. to N. E. but near the shores are several verdant vales capable of cultivation. The Harris, or south end of this isle, is still more mountainous, and presents what is called a forest, because some deer are there found. James VI. attempted to introduce industry into the Hebudes by planting a Dutch colony at Stornaway, in Lewis; but it was soon extirpated by the inhabitants. Stornaway is, however, now a considerable and flourishing town, with an excellent harbor, and contains 2,974 inhabitants. Besides cottages, there are about seventy houses covered with slate. The seasons in Lewis are oppressed with rain, as usual in the western Highlands and isles; but there is a considerable fishery. The crops are oats, bigg, and potatoes; no trees will thrive except alder and mountain ash; and hardly a shrub appears: but there are many black cattle and sheep, nor is there any want of small horses. Population of the whole island 12,164.

To the south of Lewis is North Vist, about twenty two miles in length from E. to W. and about seventeen in breadth N. to S. for recent discoveries have restored this isle to its proper form, among many other improvements which have taken place within these few years in Scottish geography. The face of the country corresponds in general with that of Lewis; and trees are equally unknown. Potatoes are generally cultivated. Westerly winds, with rain or fog, usurp two thirds of the year. Lord Macdonald is the proprietor.* Inhabitants 3,010.

The small isle of Benbecula, and some others, lie betwixt North and South Vist; the latter is about 32 miles in length N. to S. by about ten in breadth W. to E. The morassy central chain extends also through this isle; but to the east are dry hills covered with heath and verdure. The productions also resemble those of Lewis; and there are many small lakes full of excellent trout. Chief exports black cattle and kelp. This isle is also naked of wood, Inhabitants 4,595. The whole population of the Hebudes in 1801, was 80,880.

Berra, a little to the S. W. is eight miles long, and four broad. It is mountainous. Produces corn and oats; but the chief attention is paid to rearing cattle, burning kelp, and to the cod-fishery. Inhabitants 1,925. Between it and South Vist lie Eriskay, Fierra, Giga, Cara, and Heliay, and south of it Watera, Deer I. Samdera, Pabba, Mingalla, and Bernera.

The islands of Orkney and Shetland remain to be described. The Orkneys form a numerous group around the Main Land, or what, by some new and fabulous term, is called Pomona.† The Main Land is about thirty miles in length E. to W. by about thirteen in breadth N. to S. Kirkwall, the chief town of the Orkneys, contains 2,621 inhabitants, and has a stately cathedral dedicated

* Stat. Acc. xiii. 300.

† The old accounts are Wallace's 1693, and Brand's 1701; the modern, the Statistical Survey.

to St. Magnus. Opposite stands the bishop's palace, now called a castle. The chief exports of Kirkwall are beef, pork, butter, tallow, hides, calf skins, rabbit skins, salted fish, oil, feathers, linen yarn, and coarse linen cloth, kelp,* and in fruitful years corn. The chief imports are wood, flax, coal, sugar, spirits, wines, tobacco and snuff, flour, and biscuit, soap, leather, hardwares, broad-cloth, printed linens and cottons. In 1790 the exports were valued at 26,598*l.*; and the imports at 20,803*l.* The harbor is excellent. The manufactures are linen yarn, and coarse linens, and kelp. This last was introduced about sixty years ago, and has been since diffused over the Highlands and isles. In most parts of the main land the soil is good, though shallow, with a calcareous bottom. The horses are small, but spirited; and the cows, though also small, yield excellent milk. The sheep in the Islands of Orkney are computed at 50,000. Swine also abound, of a dirty white color, and diminutive size. The numbers of sea-fowl may be easily imagined. The Norse language has yielded to the English, and the manners of the people are singularly civilized for so remote a region. Their number is 13,176.

Hoy-Island, S. W. of Pomona, is ten miles long and six broad. Its surface is mountainous. Inhabitants 244. They are employed in rearing cattle and sheep. The *Dwarfic Stone*, a celebrated relic of antiquity is in this island. It measures 32 feet in length, $16\frac{1}{2}$ in breadth, and $7\frac{1}{2}$ in height, hollowed into several apartments. A very rich ore of lead was lately discovered here. *South Ronaldshay*, E. of Hoy, is six miles long and three broad. Surface level, soil fertile. Inhabitants 1,610. It possesses two excellent harbors, *Widewall Bay*, and *St. Margaret's Hope*.

Shapinsha, three miles north of Pomona, is seven miles long and three broad, in the shape of a cross. Inhabitants 744.

Rousa, N. W. of Pomona, is nine miles long and four broad. It is generally hilly. Its inhabitants with those of Eglishay, Weir, and Inhallow are 1,061. They prosecute the fisheries with great diligence.

Stronsa, $7\frac{1}{2}$ miles long and nearly as broad, is extremely indent-ed with bays. It is very hilly and contains about 3,000 sheep, 900 cattle, 500 houses, and 300 swine. Inhabitants 924.

Eda is $5\frac{1}{2}$ miles long and $1\frac{1}{2}$ broad, and is hilly. Inhabitants 718.

Westray is ten miles long and from two to six broad, and is valuable for its cattle, its sheep, and its kelp. With the little isle of *Papa Westray* it contained, in 1801, 1,624 souls.

Sanda, twelve miles long and three broad, is generally low and productive. The domestic animals in 1792, were 4,200 sheep, 1,314 cattle, 356 horses, and 140 swine. It annually produces from 500 to 600 tons of kelp. With North Ronaldshay it contained, in 1801, 2,148 inhabitants. This last is the farthest north of the Orkneys. The total population of these islands in 1801 was

* Sanda produces great quantities of kelp: when the Orkneys in general may yield 2,500 tons, 500 and 600 are drawn from that isle only. S. A. vii. 455.

24,478. The number of the islands is 30, of which 26 are inhabited.

The islands of Shetland present another group similar to those of Orkney; with a main land or chief island in its centre. The main land is much intersected by the sea: and is about 60 miles in length, by 12 miles of medial breadth.* Inhabitants 15,593. They are hardy, docile, and ingenious; and manufacture coarse linen and woollen cloths for their own use, and very fine worsted stockings for exportation. Their great occupation is fishing. Yell, or Zell, farther north, is about twenty miles long, and twelve broad. Its coast is bold, rocky, and indented, surface level, and soil tolerable. Inhabitants 2,965.

Unst, the most northern, is in 61, 15, N. It is twelve miles long, and four broad, and generally level. It is very rich in minerals, and in cattle. Eighty tons of cured fish are annually exported. Inhabitants 2,259.

These islands are 86 in number, of which 26 are inhabited. Their whole population in 1801, was 22,379.

The hills in Shetland are chiefly composed of sand-stone, brecchia, &c. The basis seems gneiss, and micaceous schistus, which are sometimes exposed to the air. Lime-stone is also found, and some granite; but on the whole the mass is arenaceous.

The climate of the Shetland isles is variable, and disturbed with rains and thick fogs. The frosts are seldom severe, and snow rarely continues long on the ground. The inhabitants are indeed sufficiently wretched, without additional evils; and a benevolent government ought to pay a particular attention to those distant prisoners. The coruscations of the Aurora Borealis illuminate the long gloom of winter, and delight the inhabitants, who call them *merry dancers*. The arable land is mostly near the coast, and produces a coarse kind of oats and bigg. Potatoes have lately formed an addition of singular advantage. The chief food of the inhabitants consists of fish, and various kinds of sea-fowl, which cover the rocks; the captors of the last shew singular skill and intrepidity, and often meet with a violent fate amidst the stupendous precipices. The cattle are rather larger than those of Orkney, and the butter is excellent if properly prepared. Sheep are not uncommon, and have been recently praised for the fineness of their fleece. The horses have mettle and beauty, and on account of the singular minuteness of their size have become objects of luxury and curiosity in England.

Lerwick, the chief town or rather village containing about 150 families, stands on an excellent harbor called Brassa Sound, forni-

* We have better charts of the coasts of New Holland, than of the isles of Orkney and Shetland. Capt. Donnelley's chart of the Shetland isles, seems the most accurate, in which the Main land corresponds in length with Lewis, while Ainsley's would give a length of almost ninety miles. Yell and Unst seem also more properly disposed in Captain Donnelley's map. The Danish Captain Von Lowenorn (Zach's Geographical Journal, May, 1799) found that the Shetland isles were about one third shorter than represented in the English map (Preston's); which also puts the northern extremity half a degree further north than it was found by minute observations. Lowenorn published a map of these isles in 1787.

ed by the little isle of Brassa on the east of the Main land, and formerly greatly frequented by the Dutch fishers.

The chief exports of Shetland are fish of various kinds, chiefly herrings, cod, ling, and torsk, or tusk. In this distant region there are neither roads nor bridges, which may be pronounced the first steps in any country towards the progress of industry. The same deficiency occurs in the Orkneys, and even in the Northern extremity of Scotland; where however a road has been recently opened between Ullapool and Dornoch.



IRELAND.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, ANTIQUITIES.

Names.] THE large and fertile island of Ireland, being situated to the west of Great Britain, was probably discovered by the Phœnicians as early as the sister island; and it appears that the island was known to the Greeks by the name of *Juverna*, about two centuries before the birth of Christ. When Cæsar made his expedition into Britain, he describes *Hibernia* as being about half the size of the island which he had explored; and, while the Romans maintained their conquests in the latter region, Ireland continued of course to be well known to them, and Ptolemy has given a map of the island which is superior in accuracy to that which represents Scotland. Towards the decline of the Western Empire, as the country had become more and more known, and had been peopled with various tribes, the Romans discovered that the ruling people in Ireland were the *Scoti*; and thenceforth the country began to be termed *Scotia*, an appellation retained by the monastic writers till the eleventh century, when the name *Scotia* having passed to modern Scotland, the ancient name of *Hibernia* began to reassume its honors. It is supposed that this name, and the Gothic denomination *Ireland*, are mere modifications of the native term *Erin*, implying the country of the west.

Extent.] The extent of this noble island is about 300 miles in length, and about 160 at the greatest breadth. The contents in square miles may be computed at 27,457*, and the population being about four millions, there will be about 146 inhabitants to each square mile.

Original Population.] It is probable that the original popula-

* Beaufort, p. 14, says 30,370 English miles.

tion of Ireland passed from Gaul, and was afterwards increased by their brethren the Guydil from England. About the time that the Belgæ seized on the south of England, it appears that kindred Gothic tribes passed to the south of Ireland. These are the Fir-bolg of the Irish traditions ; and appear to have been the same people whom the Romans denominated Scoti, after they had emerged to their notice, by not only extending their conquests to the north and east in Ireland, but had begun to make maritime excursions against the Roman provinces in Britain.

Progressive Geography.] The map of Ireland by Ptolemy, above mentioned, is the first geographical document of the island. The general shape, rivers, and promontories, are delineated with as much accuracy as could have been expected. Nay as we advance into the middle ages, the geography of Ireland becomes more obscure. The chief tribes mentioned by Ptolemy are the *Darni* upon the north-east, the *Venicni* and *Robogdii* on the north-west. Beneath them are the *Nagnati*, *Auteri*, and *Gangani*, on the west, the *Erdini* in the centre, and the *Voluntii*, *Eblani*, and *Cauci*, on the east ; succeeded by the southern tribes of the *Menapii*, *Brigantes*, *Bodii*, *Invelni*, *Velabri*, and *Luçeni*. Ptolemy also mentions ten towns ; of which the chief is *Eblana* now Dublin. In the middle ages we find the *Dalriadi* on the north-east ; and the *Cru-theni* on the north-west. The large tribe of *Nelli* occupy much of the centre. The *Voluntii* seem transformed into the people of Ullagh ; the *Erdini* of Ptolemy yield the name to *Argialli* ; and the *Nagnati* to Maigh Nais. The *Gangani* of Ptolemy seem the Galeng of the middle ages. The *Menapii*, &c. must be traced in Munan, or present Munster. The towns mentioned by Ptolemy might also be traced with some degree of accuracy.

The ravages of the Danes, in the ninth and following centuries, cannot be supposed to throw much light on the progressive geography of Ireland : but the settlements of the English under Henry II. certainly contributed to that end, for Giraldus Cambrensis at that period composed his description of Ireland, which amidst numerous fables contains some curious facts ; and the geography of Ireland was little better known till the reign of Elizabeth, when Stanhurst published his description, which was soon followed by that of Spencer the poet. The most remarkable distinction introduced by the new invaders into Ireland was that of the English pale, or circuit of a few counties around Dublin, within which the English language was chiefly spoken. So inconsiderable indeed were the English possessions in Ireland, that the monarchs only assumed the style of Lords of Ireland, till the reign of Henry VIII. when king of Ireland became a part of the sovereign's style. Nor was Ireland completely subjugated till the reign of the first James, who adds this merit to that of founding the American colonies ; but mankind will ever be infatuated by the triumphs of war, and prefer a meteor to the pure light of a pacific reign.

Historical Epochs.] The first historical epoch of Ireland is its original population by the Celtic Gauls, and the subsequent colonization by the Belgæ.

2. The maritime excursions of the Scoti against the Roman provinces in Britain.

3. The conversion of Ireland to Christianity in the fifth century, which was followed by a singular effect; for while the mass of the people retained all the ferocity of savage manners, the monasteries produced many men of such piety and learning, that Scotia or Ireland became celebrated all over Christendom.

4. This lustre was diminished by the ravages of the Scandinavians, which began with the ninth century, and can hardly be said to have ceased when the English settlement commenced. The island had been split into numerous principalities, or kingdoms, as they were styled; and though a chief monarch was acknowledged, yet his power was seldom efficient, and the constant dissensions of so many small tribes rendered the island an easy prey.

5. In the year 1170, Henry II. permitted Richard Strongbow Earl of Pembroke to effect a settlement in Ireland, which laid the foundation of the English possessions in that country. There are however coins of Canute king of England, struck at Dublin, perhaps in acknowledgment of his power by the Danish settlers.

6. Ireland began to produce some manufactures about the fourteenth century, and ker-sayes or thin woollen cloths were exported to Italy. It is probable that these were produced by the Bristolian colony, which had passed to Dublin, as mentioned in the description of England.

7. Richard II. king of England, attempted in person the conquest of Ireland, but being imprudent and ill served, nothing of moment was effected. The subsequent attempts of the English monarchs to accomplish this purpose need not be enumerated.

8. In the reign of James I. Ireland became entirely subjugated; and colonies of English and Scots were established in the north.

9. The chief mean of the assimilation of the countries having been completely neglected, namely, the universal institution of parochial schools, for the education of children in the protestant religion and English language, the Irish continued a distinct people; and being instigated by their fanatic priests executed their dreadful massacre of the English settlers in 1641. This insurrection was not totally crushed till Cromwell led his veterans into Ireland.

10. The appearance of James II. in Ireland to reclaim his crown, may also deserve a place.

11. The amazing progress of Ireland in manufactures and commerce, within these twenty years, may be classed as the most illustrious of its historical epochs.

12. The deplorable events which have recently happened in Ireland, have led the way to its union with Great Britain, a measure which has been productive of great reciprocal advantages.

Antiquities.] Upon a review of the more ancient of these historical epochs, and of the monuments which may be considered as belonging to each, it must be considered that the edifices having been constructed of wood till the eleventh or twelfth century, it cannot be expected that any remains of them should exist.

Stone was chiefly employed in the construction of funeral erections of various kinds, nor are barrows wanting in Ireland, being hillocks of earth, thrown up in commemoration of the illustrious dead. Other monuments, commonly styled Druidic, may also be found in Ireland; such as single stones erect, circular temples or rather places of judgment and the like, which may more properly be ascribed to the Belgic colony.*

The conversion of Ireland to Christianity was followed by the erection of a vast number of churches and monasteries, the latter being computed to exceed one thousand in number; but all these edifices were originally small, and constructed of interwoven withes, or hewn wood; for St. Bernard in the twelfth century, mentions a stone church as a singular novelty in Ireland.

But the Scandinavian chiefs must before this period have introduced the use of stone into the castles necessary for their own defence against a nation whom they oppressed. To the Scandinavian period also belong what are called the Danes Raths, or circular intrenchments; and probably some chapels.

Of the eleventh and twelfth centuries many monuments, castellated or religious, may probably exist in Ireland. Brian Boro, king of Munster, having been declared sovereign of Ireland in the year 1002, distinguished himself by his virtues and courage; and Dermid III. A. D. 1041—1073 was also an excellent and powerful prince. Under these monarchs and their successors, Tudelvac and Moriertac, the power of the Ostmen or Scandinavians was considerably weakened. The native chiefs had been taught the necessity of fortresses, and were generally devoutly attached to religion; it is therefore to be inferred that many castles, churches, and monasteries now began to be partly constructed in stone by architects invited from France and England; but perhaps the round towers were erected by native builders.

The castles, churches, and monasteries, erected since the period of the English settlement might be counted by hundreds, and for them one general reference may be made to the works of Ledwich and Grose. Among smaller reliques of antiquity, the golden trinkets found in a bog near Cullen, in the south, deserve mention; as gold was found in Gaul, they are perhaps ornaments of the ancient chiefs brought from that region.

CHAPTER II.

POLITICAL GEOGRAPHY.

RELIGION, ECCLESIASTIC GEOGRAPHY, CIVIL DIVISIONS, GOVERNMENT, POPULATION, ARMY, NAVY, REVENUES, POLITICAL IMPORTANCE AND RELATIONS.

Religion.] THE legal religion of Ireland is that of the church of England; but it is computed that three fourths of the

* Ledwich's introduction to Grose's Antiquities of Ireland, for Cromlechs in the county of Cavan, and a cave in Meath.

people are Catholics; and of the remaining fourth, the Presbyterians are supposed to constitute one half.

Ecclesiastical Geography.] The ecclesiastic geography of Ireland comprises four arch-bishoprics, in themselves an evidence of the great number of churches formerly existing; and eighteen bishoprics.

Under the archbishop of Armagh
are the bishops of

Meath	{	}
Kilmore and Ardagh		
Dromore		
Clogher		
Raphoe		
Downe and Conner		
Derry		
Kildare		
Ferns and Laughlin		
Ossory		

Under the archbishop of Dublin

Waterford and Lismore	{	}
Limerick		
Killaloe		
Cork and Ross		
Cloyne		
Elphin		
Cloyne		
Killala and Achonry*		

Under the archbishop of Cashel

Elphin	{	}
Cloyne		
Killala and Achonry*		

Under the archbishop of Tuam

The Catholics have also a hierarchy nearly similar, but the metropolitans and bishops are considered by the protestants as merely titular. The presbyterians being here dissenters, their form of ecclesiastic government necessarily approaches that of the independents.

Government.] The government of Ireland was constructed upon the plan of that of England, being vested in a house of commons, and another of peers, while the king was represented by a lord lieutenant or viceroy. But no act of importance was considered as valid, till it received the sanction of the king and council of Great Britain. At present Ireland being united to England, the form of government is of course identically the same. There are some minute variations between the statute and common laws of Ireland and those of England.

Civil Divisions.] Ireland is primarily divided into four provinces, viz Ulster to the North, Connaught to the West, Leinster to the East, and Munster to the South. The subdivisions are counties, of which the following is a list :

* Gough's Camden, iii. 487. The primacy is worth 8000*l.* a year, Derry 7000*l.* the other bishoprics from 4000*l.* to 2000*l.* Young, ii. 189.

In Ulster	{ Donegal Londonderry Antrim Tyrone Fermanagh Monaghan Armagh Down Cavan Leitrim Sligo Mayo Galway Roscommon	In Lienster	{ Louth Meath Longford Westmeath Dublin King's county Kildare Queen's county Wicklow Carlow Kilkenny Wexford Clare Tipperary Waterford Limerick Cork Kerry
In Connaught		In Munster	

Population.] The population of Ireland is generally estimated at four millions. By a census taken some years since they amounted to 3,427,209. The number of houses was 489,897. Numerous migrations have taken place from Ireland to the various British settlements; but no separate colony of Irish has been founded.

Army.] Besides large contributions to the British army, Ireland in 1780 raised upwards of 40,000 volunteers, and has recently equipped a considerable militia and yeomanry. If we suppose every eighth person capable of arms, Ireland might raise a force of 500,000 men. Of mariners Ireland contributes an inadequate proportion, and inferior in skill to the British.

Revenues.] The average amount of the Irish revenue in three years, viz. 1796-7-8 was £1,860,000. Its amount, in 1806, was £ 5,604,000; and in 1808, 6,174,000.

Political Importance, &c.] The political importance and relations of Ireland are great, but intimately blended with those of England; while her western position imparts singular advantages in the commerce with America and the West Indies.

CHAPTER III.

MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION,
UNIVERSITIES, CITIES AND TOWNS, EDIFICES, INLAND NAVIGATION,
MANUFACTURES AND COMMERCE.

Manners and Customs.] THE manners of the superior classes of people in Ireland now nearly approach to the English standard, except that excess in wine, unfashionable in England, continues to prevail too much in the sister island. The Irish gentry are also seldom addicted to literature or the arts; but amuse themselves with hunting and other robust exercises. Hence an overflow of health and spirits; and the observation of an able

writer, that Ireland produces the stoutest men, and the finest women in Europe, must not be confined to the inferior classes. The common people of Ireland still retain too many features of national manners. A funeral is joined by all the men and women of the vicinity, and is accompanied with dreadful howls, and other barbarous ceremonies. Their diet consists chiefly of potatoes and buttermilk; and the rural cottage is a wretched hovel of mud. The favorite liquor is usquebaugh, or the water of life; but more properly the water of death, being an ardent and pernicious distillation from corn.

Language.] The English language daily gains ground in Ireland, and might, if proper attention had been bestowed on the national education, have become, ere now, the general idiom of the country. The ancient Irish is a dialect of the Celtic intermingled with many Gothic words, imported by the Belgic colonies, by the Scandinavians, and by the English.

The Lord's prayer in the Irish idiom runs in the following terms :

Ar nathair ata ar Neamh. Naomhthar Hainm. Tigeadh do Ríoghachd. Deuntar do Thoil ar an Ttalámh mar do nithear ar Neamh. Ar naran la athamhail tabhair dhuinn a niu. Agus maith dhuinn ar Bhíacha mar mhaithmidne dar bhfeithreamhnuibb fein. Agus na léig sinn a cathughadh. Achd síar sinn o Olc. Amen.

Literature.] The literature of Ireland has a venerable claim to antiquity; for as has been already mentioned, in the centuries immediately following the introduction of Christianity many writers arose, whose works consist of lives of saints, and works of piety and discipline, presenting to the inquisitive reader many singular features of the history of the human mind. The Anglo-Saxons derived their first illumination from Ireland; and in Scotland literature continued to be the special province of the Irish clergy, till the thirteenth century.

Education.] In no quarter of the British dominions, has education been conducted upon so solid and rational a plan as in Scotland; and no where has it been so much neglected as in Ireland. It is to be hoped that one consequence, and not the least important, of the union, will be the introduction of parochial education into Ireland, a sure mean of preventing the ebullitions of ignorant discontent.

Universities.] With four archbishoprics Ireland only possesses one university, that of Dublin.* This institution was first projected by archbishop Leech, about the year 1311; but death having interrupted his design, it was revived and executed by Bicknor, his successor, and enjoyed moderate prosperity for about forty years, when the revenues failed.

In the reign of Elizabeth the university was refounded by voluntary contribution, under the auspices of Sydney the Lord Deputy. It consists of a chancellor, vice-chancellor, provost, vice-provost, twenty-two fellows, and thirteen professors of various sciences. The number of students is commonly about four hundred, including seventy on the foundation. The building consists

* Gough's Camden, iii. 555.

of two quadrangles, and it contains a library of some account, and a printing-office.

At Kilkenny there is an endowed school, or what is called a college; but its institutes seem little adapted to the quiet of an academical life.

The Dublin Society for the improvement of Agriculture and Manufactures was instituted by the efforts of the patriotic Dr. Samuel Madden in 1731, being the earliest of the kind now existing in Europe.*

Cities and Towns.] Dublin, the capital city of Ireland seems to be the Eblana of Ptolemy; but continued little known till the tenth century, when it was mentioned in the Saxon chronicle; and in the beginning of the next century, we have coins of Canute struck at Dublin. The situation is delightful, in a bottom, between ranges of hills on the south and north. It is pervaded by the river Liffy, and by some rivulets. The inhabitants in 1802, were 167,899.† This capital being justly accounted the second in the British dominions.

The circumference of Dublin may be about ten miles, being about two miles and a quarter in length, and as much in breadth. The harbor is incommodious, being impeded with two banks of sand, called the north and south bulls, which prevent ships of large burden from passing the bar; but some improvements have been made, and others might be carried into execution. A mole has been constructed four miles in length; and the quays are spacious and beautiful. There are six bridges, the chief of which is that called Essex. The castle was founded about the year 1205, and continues, though in great part rebuilt, to be the sanctuary of the public records, as it formerly was the residence of the viceroy. The parliament-house is a superb building, erected at considerable expense. The church of St. Patrick is the cathedral, a venerable building, which was begun in the end of the twelfth century; but the steeple, the highest in the city, was not erected till the year 1370. The royal exchange was completed in 1779; and among other beautiful edifices must not be omitted that whirlpool of expenditure the custom house; and the houses of the duke of Leinster, the earl of Charlemont, and others.

Dublin has an ample supply of native provisions; but coals are imported from Scotland and Cumberland.

Cork is a city of considerable importance, situated on the south east side of the island, and supposed to contain about 70,000 inhabitants. The haven ranks among the most capacious and safe in Europe; and the exportation, the largest in the sister kingdom, consists chiefly of beef, hides, tallow, and butter. It is the grand market of Irish provisions; and it was computed that not less than a hundred thousand cattle were here annually killed and salted, between the months of August and January. This city lies chiefly in a marshy island, surrounded by the river Lee; but the marshes on the opposite side of the river having been

* Young, ii. 210.

† Hassel.

drained, ample space has been given to the recent improvements.*

Limerick unites the fortunate situation of being almost central to the south of Ireland, with an excellent haven, formed by the long estuary of the river Shannon. The city is accounted the third in Ireland, and was formerly fortified with great care. The episcopal see is said to have been founded in the year 652. The Danes held the city from the ninth century to the eleventh. There are three bridges over the river, one of which consists of fourteen arches. The number of inhabitants has been computed at 50,000. The chief exports are beef and other provisions.†

The other chief towns in Ireland shall be briefly mentioned, in a geographical progress from the south towards the north.

Galway is a town of considerable note, and carries on an extensive trade with the West Indies. The port is commodious and safe, but distant from the city, which can only be reached by vessels of small burden: the number of inhabitants is computed at 12,000. Greater trade is now carried on in the bay of Siigo than at Galway.‡

On Clew bay, in the centre of the west of Ireland, stands Newport, but by some fatality the advantages of the county of Mayo, have not been improved, nor are there any towns of much consequence upon the whole western coast. Sligo is, however, increasing in trade, and the inhabitants are computed at 8,000; and Castlebar is also a prosperous town.§

Londonderry is more remarkable for its ancient and military fame than for its present commerce, though not unimportant. It stands on the river Foyle, over which a wooden bridge of singular construction, one thousand and sixty-eight feet in length, was thrown in 1791. Inhabitants about 11,000.¶

Belfast on the north-east is in the centre of the linen manufactures, and may almost be regarded as a Scottish colony. The inhabitants are computed at 18,000. The chief manufactures, cotton, cambric, sail-cloth, linen, with glass, sugar and earthen ware. It maintains considerable intercourse with the commercial city of Glasgow; and the grand exports are to the West Indies and America.

Dundalk has also its manufactures of linen and muslin. Drogheda imports sea coal and goods from England, and exports considerable quantities of grain. It is a well built town on the Boyne: the inhabitants are computed at 10,000.

Towards the south-east, Wexford claims the first notice, being remarkable for its woollen manufactures; but the haven, though spacious, is not sufficiently deep for large vessels. The inhabitants are 9,000.

Waterford is a city of considerable importance, situated on the river Suir, and is supposed to have been founded by the Danes. It suffered greatly in the late disorders; and the inhabitants cannot now be supposed to exceed 30,000. The chief exports are beef, pork, &c. and linen. Packet-boats sail regularly betwixt Waterford and Milford Haven.

* Mr. Young, vol. i. 417, expresses his astonishment at the populousness of Cork. The duties of the harbor were, in 1751, £2,000*l.*; in 1779, £40,000*l.*

† Gough's Camden, iii. 517.

‡ Beauf. 9.

§ Ibid. 72.

¶ Hassel.

The sea-ports of Dungarvon and Youghall are lost in the superior consequence of Cork; but Kinsale is a maritime arsenal, and is supposed to contain 8,000 souls.

The chief towns in the interior, Armagh, Tuam, Cashel, &c. &c. are rather venerable from their ecclesiastic antiquity, than important in themselves. Kilkenny is, however, an exception; a handsome town, with 16,000 inhabitants.

Edifices.] Many of the chief edifices of Ireland have been already mentioned in the description of Dublin. The cathedrals seldom aspire to great praise of architecture; and the villas of the nobility generally yield in splendor to those of England, and even of Scotland.

Roads.] Though the turnpike roads in Ireland are rather neglected, yet the cross roads are admirable; and Mr. Young has explained at length the principles upon which they are constructed.*

Inland Navigation.] The advantages derived by England from inland navigation soon attracted the attention of Ireland; and not many years after the example set by the duke of Bridgewater, a grand canal was begun from the city of Dublin to the river Shannon, and was actually carried on to the bog of Allen, at the expense of 77,000*l.*† But the engineer's want of ability occasioned great errors in the original plan and survey; and the work was interrupted in 1770. Nor, unhappily, have proper means been adopted to execute the plan, which remains imperfect, after an expenditure of half a million; and an able writer informs us, that even the design was absurd, as the country through which the canal passes is one of the least productive for the Dublin market.‡

A canal is completed from the town of Newry to the sea, which was, however, intended to have passed that town towards the collieries of Drumglass and Dungannon. This attempt, however, to supply Dublin with Irish coals, has hitherto been only successful in part, though the beds of coals are said to be very abundant.

Manufactures and Commerce.] Though we find, as has been already mentioned, that Ireland was distinguished at an early period for her manufacture of woollen-stuffs, yet the spirit of industry made little progress, and the chief Irish manufactures are of recent institution. But the linen manufacture was not unknown in Ireland in more early times, as appears from the acts of parliament in the reigns of Henry VIII. and Elizabeth.

The manufactures and commerce of Ireland have experienced an unexampled increase since the union with Great Britain in 1801. The value of hardware imported in 1799, was £ 60,000 sterling; and in 1808 £250,000. The following table will exhibit this increase in various articles:

	1799	1807	1808
Cotton, lbs.	460,000	1,223,000	1,486,000
Carpeting, yds.	51,000	133,000	187,000
Sugar, cwt.	211,000	245,000	447,000
Drapery, yds.	1,562,000	2,233,000	3,078,000
Cotton cloth, yds.	124,000	141,000	228,000

* Vol. ii. 151.

† Phillips, 339.

‡ Young's Tour in Ireland.

The exports of Ireland in various articles in these years were as follows :

	1799	1807	1808
Linen, yds.	36,174,000	41,587,000	43,904,382
Flax, tons	300	1,600	2,440
Linen yarn, tons	830	412	1,290

The average annual export in 1797-8-9 amounted to, £ 6,121,757. In 1806, £ 9,314,854 ; 1807, £ 10,110,385 ; 1808, £ 12,577,517.

The amount of the imports in 1808, was £ 8,860,325 ; of which £ 329,810 were re-exported.

The amount of British manufactures purchased by Ireland in 1799, was £ 2,087,672 ; and in 1808, £ 4,500,000.

A large portion of the commerce of Ireland arises from her abundant stores of black cattle, the moisture of the climate rendering the pasturage remarkably luxuriant.

The average annual exports of Ireland for the seven years previous to 1791, amounted, according to Dr. Beaufort, to 4,357,000*l.*

CHAPTER IV.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Climate.] IRELAND lying nearly in the same parallel with England, the difference of climate cannot be supposed to be very important. The mean temperature of the north is about 48 ; of the middle 50 ; of the south 52 of Fahrenheit.*

Face of the Country.] In considering the face of the country it must be remembered, that Ireland forms a striking contrast to Scotland, being mostly level, fertile, and abundant in pasturage. The chains of hills, for they can hardly aspire to the name of mountains, are few, and unimportant.

Soil and Agriculture.] The soil and agriculture of Ireland are topics which have been ably illustrated by an intelligent writer.† He observes, that the quantity of the cultivated land exceeds, in proportion, that of England. The most striking feature is the rocky nature of the soil, stones generally appearing on the surface, yet without any injury to the fertility. The stones are, for the most part, calcareous, and appear at no great depth, even in the most flat and fertile parts, as Limerick, Tipperary, and Meath. The climate being more moist than that of England ; the verdure never appears parched with heat.‡ Tillage is little understood,

* 1 Trans. R. I. A. vol. ii.

† Young's Tour, ii. 72.

‡ The Curragh of Kildare is a most beautiful lawn, of above 4,000 English acres, a sheep-walk of the softest turf, and most delicious verdure. Young ii. 7.

even in the best corn counties ; turnips and clover being almost unknown : the wheat sown upon fallow, and followed by several crops of spring corn. The farmers are oppressed by the shocking system of *middle men*, who rent farms from the landlords, and let them to the real occupiers ; who, as well as the proprietors, suffer greatly by this strange practice. Lime-stone gravel is a manure peculiar to Ireland ; having, on uncultivated land, the same wonderful effects as lime, and on all soils it is beneficial.*

Rivers.] Among the chief rivers of Ireland must first be mentioned the Shannon, which rises from the Lake of Allen, and passing through two other large lakes, Lough Ree, and Lough Derg, afterwards extends below Limerick, into a vast estuary or firth, about sixty miles in length, and from three to ten in breadth.† This noble river is, almost through its whole course, so wide and deep, as to afford easy navigation. Boate informs us, that the celebrated earl of Strafford designed to remove a rock, six miles above Limerick, which forming a cataract, impedes the intercourse between the upper and the lower parts. The whole course of the Shannon may be computed at 170 miles.

The other rivers of Ireland have little of this majestic character.

The river Barrow rises about forty miles to the west of Dublin, near the source of the Boyne ; and, after a course of about one hundred miles, enters the sea on the south east, having received the rivers Nour and Suir, and formed the harbor of Waterford.

The Blackwater, another considerable stream in the south, enters the sea at Youghall bay.

The Slaney forms the harbor of Wexford.

The Liffy is an inconsiderable stream, ennobled by the capital.

The Boyne, after a course of about fifty miles, also enters the eastern sea ; the other rivers on the east are small, and unimportant.

In the north the Banna is a considerable stream, which pervades Lough Neagh, and enters the sea after a course of about seventy miles. By the canal of Newry it communicates with Carlingford bay ; and thus insulates the north-east projection of Ireland.

The river Foyle passes by Londonderry, and has a considerable estuary called Lough Foyle. The Swilly is of considerable length, but forms a long estuary.

On the N. W. Lough Ern issues into Donegal bay by a considerable stream ; but no other river of consequence occurs till we reach the estuary of the Shannon ; nor are the rivers on the S. W. of much note.

The lakes of Ireland are numerous, and some of them extensive. The term *Lough*, corresponding with the Scottish *Loch*, is sometimes applied to an estuary, or to an inlet of the sea, such as the Swilly, the Foyle, that of Strangford, Down, &c. The chief lake of fresh water is that of Ern, which exceeds thirty British miles in length, and twelve in its greatest breadth ; it is divided

* Young 171.

VOL. II.

18

† Boate, p. 86.

by a narrow outlet from the southern part into the northern, of about four miles in length.

Next in magnitude is Neagh, about twenty-two miles in length, and twelve in breadth. Both these lakes are studded with small islands ; and the latter is said to possess a petrifying quality.

The Lake of Corrib, in the county of Galway, is about twenty miles in length, and from two to five wide. Those of Ree and Derg are less considerable in size ; and there is a smaller lake also named Derg, in the N. W. which was remarkable in superstitious times for a little Island, containing what is called the purgatory of St. Patrick.

Among the lakes of the second magnitude must be first named the beautiful and interesting Lough of Killarney in the S. W. abounding with romantic views, and fringed with the arbutus, no where else a native of the British dominions. This is almost the only lake in the south of Ireland ; and the observation may be extended to the east. On the N. W. are the lakes of Eask, Frierty, Melve, Macnean, and Gill. That of Allen, as already mentioned, is a chief source of the Shannon, into which the Gara and Key also pour their waters. Further to the west are two considerable lakes, the Conn and the Mask ; nor must those of Corrafin be forgotten.

Mountains.] The mountainous chains in Ireland are neither numerous nor important ; but an upland ridge divides the country from the N. E. to the S. W. giving birth to several of the rivers. The Irish hills generally form short lines, or detached groups. One group of considerable height appears on the west and south of Lough-Lane, or what is called the lake of Killarny : of these Mangerton is 2,500 feet above the sea. A small line of hills extends on the N. W. of Bantry bay, and passes to the east, under the name of the Shehy mountains.* To the north of this is the line of Sliblogher and Nagles, followed by the Galtee mountains ; and towards the east, are those of Knockendown, which bend southward towards the bay of Dungarvon. A small chain also appears to the south of Tralee, which, with a group to the N. E. may be said to complete the enumeration of the mountains of Munster.

In Leinster is the mountain of Leinster, the line of Slieb-loom on the S. W. and a considerable group to the south of Dublin, styled the Kippure mountains, or those of Wicklow. The extent of this group is about thirty English miles in length, by about twelve in breadth.

In Ulster is a small group, called the mountains of Mourne, in the S. E. corner of the province : one of them, Donard, is said to be about the height of Mangerton. The hills of Slievecroob (in the Irish language *sliabh*, signifies a mountain), form the centre of the county of Downe ; and several hills are sprinkled over the eastern half of Antrim. On the north west of Loughneagh are those of Slievegallan and Carnbeg. Slieve Snaght is a

* Beaufort's Memoir of a Map of Ireland.

considerable mountain N. W. of Loughfoyl, whence other lines and groups extend down to Loughern.

The eastern part of Connaught presents numerous marshes; but few mountains, except those of Baughta on the south. The extreme western peninsula is one of the most mountainous regions in Ireland. Among other names may be mentioned, Mount Nephin, in the county of Mayo, a solitary hill of 2640 feet, and one of the most considerable in the island. That of Croagh Patrick, on the S. E. of Clewbay, a cone of 2666 feet; the Fernamoor mountains to the west of Loughmask; and the Twelve Pins, a line of so many small peaks in Ballinahinch; with others to the south of Loughcorrib.

Forests.] Scarcely the semblance of a forest remains in Ireland; and Boate has long since observed, that the woods have been greatly diminished since the entrance of the English, partly from the extension of tillage, and partly from the necessity of opening up the recesses of banditti. Another great cause was, the consumption in domestic fuel, and in the iron manufactures, the coal-mines not having been explored.

Bogs.] The place of the forests is unhappily usurped by the moors or bogs, which form a remarkable feature of the country. Boate divides them into several genera and species, forming an elaborate scale of sterility. The dry heaths are generally confined to the mountains. The bogs he sub-divides into four descriptions: 1. The grassy, in which the water being concealed by herbage, they become extremely perilous to travellers: some of these are dry in the summer. 2. The pools of water and mire. 3. What he terms hassocky bogs, or shallow lakes studded with tufts of rushes, which are chiefly found in the province of Leinster, especially in King's and Queen's counties. 4. The peat moors. Ornaments of gold, and other relics of antiquity, have, from time to time, been discovered in the bogs at great depths; and there are other indications that they are of comparatively recent formation. It is hoped that the hand of industry will, in time, remove many of these blemishes; and one of the greatest improvements of modern agriculture is that of reclaiming peat moors, by means of calcareous manure.

The Irish bogs differ from the English morasses in being rarely level, but rising into hills; and there is a bog in Donegal that is a perfect scenery of hill and dale. The plants are heath, with some bog myrtle, and a little sedgy grass.

Botany.] The study of botany has been less cultivated here than in any other part of the united empire; and the neighbourhood of Dublin, which has been the best explored, affords no rare, and few characteristic plants. From the general mildness of the climate, the extensive tracts of bog, and the vast mountainous ranges that intersect the country, and afford capacious basons for its numerous lakes, it is obvious that the Flora of Ireland, when complete, will probably contain several species that are strangers to the rest of the British islands. On the mountains of Sligo is found the *Saxifraga umbrosa*, (known in our gardens by the

name of *London pride*,) and the romantic scenery of Killarney, in the county of Kerry, is the most northern habitat of the Arbutus Unedo : the heaths abound with the stately Erica Daböeci : and the mountain avens, bear-berry, with other Alpine plants, already noticed in the botany of Scotland, blossom unnoticed amid the wide solitude of their rocky fastnesses.

Zoology.] In passing to the zoology of Ireland it may be expected, that not many varieties should be found between the Irish animals and those of England.

The Irish horses, called hobbys, are of a small breed, remarkable for the gentleness of their pace.

The Irish hound is one of the noblest animals of the class, and formerly celebrated for his size and vigor, but the breed is now almost extinct.

Bede has commemorated the praise of Ireland for abundance of honey, and of milk, so that the country seems, even in early times, to have abounded in cattle. He also mentions the numerous herds of deer, which animal the progress of cultivation has now rendered rare. In various parts of Ireland are dug up enormous horns, probably belonging to a species of deer now extinct. Some of these horns have been found of the extent of fourteen feet from tip to tip, furnished with brow antlers, and weighing three hundred pounds ; the whole skeleton is frequently found with them. It is supposed that the animal must have been about twelve feet high.

Mineralogy.] The mineralogy of Ireland has been recently ennobled by the discovery of considerable masses of native gold, in the county of Wicklow, to the south of Dublin. These were found in a brook, running west to east, to the river of Avonmore, where it is joined by the river Aghran ; and on a declivity of the mountain called Croughan Kinshelly, about seven English miles west of Arklow, and six south-west of the noted copper mines of Cronbane.* It is said that a jeweller, who lately died in Dublin, often declared, that gold from that spot had passed through his hands to the value of 30,000l. the secret being retained for many years, and some pieces weighing to the amount of 70 or 80 guineas. It is now worked for government, and it is said that a very massy vein has been recently discovered, which, it is hoped, will greatly benefit the country ; for mines have, in all ages, ancient and modern, enriched and improved the countries where they were found, and the exception, if such, of Spanish America is to be assigned to causes of a different nature.

The silver found in the Irish mines deserves more attention. Boate mentions a mine of this metal, intermingled with lead, which was wrought in the county of Antrim, and yielded a pound of pure silver from thirty pounds of lead. Another, less productive of silver, was found near the harbor of Sligo, in Connaught ; and a third in the county of Tipperary, twelve miles from Limerick. The ores of this last were of two kinds, most generally of a

* Philos. Trans. 1797.

reddish color, hard, and glistening ; the other, which was the richest in silver, resembled a blue marl. The works were destroyed in the Irish insurrections under Charles I.

Copper has been recently found in the county of Wicklow, and at Muccross, in Kerry.

One of the chief mineral productions of Ireland is iron, the mines of which were little known till the time of Elizabeth.

The beds of coal to be seen in various regions of Ireland have not yet been explored to their proper extent. That of Kilkenny, found at Castlecomer, is deservedly celebrated among mineralogists, as the purest which has yet been traced in any quarter of the globe.

One of the most beautiful marbles of Ireland is found near Kilkenny, and others have been discovered in various parts of the island. Slate, of various kinds, is also abundant.

Natural Curiosities.] Among the natural curiosities of Ireland would, in ancient times, have been mentioned the purgatory of St. Patrick, a miserable Monkish delusion. At present the lake of Killarney attracts more deserved devotion. This picturesque expanse of water is about ten miles in length, and from one to seven in breadth : it is divided into three parts, called the upper, lower, and Muckruss lake ; and is surrounded by an amphitheatre of mountains, clothed with trees, whose verdure is contrasted with intervening rocks. The Arbutus, with its scarlet fruit, and snowy blossoms, here vegetates in great luxuriance. Nor are cascades, and other features of rural beauty wanting to complete the scene.* The isle of Innisfallen is not only romantic, but of venerable fame for the annals there written.

What is called the Giant's Causeway must be distinguished among the most remarkable of the curiosities of Ireland. The first account is that given by Sir R. Buckley, in a letter to Doctor Lister, 1693. This surprising collection of basaltic pillars is about eight miles N. E. from Coleraine. The adjacent coast is verdant, but precipitous ; and from it the Causeway projects into the sea, to an unknown extent. The part explored is about 600 feet in length ; the breadth from 240 to 120 ; the height from 16 to 36 feet above the level of the strand. It consists of many thousand pillars, mostly in a vertical position ; some of them high, others broken, and, for a considerable space, of an equal height, so as to form a pavement. They are closely compacted together ; though the form be various, trigonal, tetragonal, pentagonal, hexagonal, and heptagonal ; the most numerous are the pentagonal. The pillars are rarely composed of one entire piece, but mostly consist of short or long joints, either plane or alternately concave and convex. The pillars are from 15 to 24 inches, or more, in diameter. Towards the N. E. is what is called the organ, in the side of a hill, consisting of fifty pillars ; that in the middle is 40 feet high, the others gradually diminishing. Similar pillars are also found a mile and a half inland, four miles to the west of the Giant's Causeway, and at the capes of Bengore and Fairhead.

* Young i. 444, &c.

The basalt of the Giant's Causeway is of a very compact texture, and the angles of the pillars have preserved their sharpness, though exposed to the sea for perhaps two or three thousand years.* The same shore also presents horizontal and bending pillars, like those of Staffa ; the attendant minerals are zeolite in the irregular basalt, steatite, and bits of agate, red ochre, and iron ore.

IRISH ILES.

THE few and small isles around Ireland are unimportant, but must not be wholly omitted. To the N. E. of Dublin is Lambey, a small island, already mentioned ; and at the S. E. extremity of Ireland, appear the rocks called Tashard and the Saltee isles. At the southern extremity is the isle of Clare, about three miles and a half in length, and more remarkable for its southern promontory called Cape Clear, than for any other object. Turning to the N. W. are the isle of Denssey, the Hog islands, and the Skellings ; to the north of the latter is Valentia, off the coast of Kerry, which is followed by the Blaskets, or Ferriter islands. The south Arran islands lie at the mouth of the noble bay of Galway, and are remarkable for a small kind of oats without any husk, and for large calves : the chief is near seven miles in length. A number of small islands encircle the coast, which projects furthest into the Atlantic, such as Ganorena, Littermore, Minish, Inconee ; and further to the N. W. Dunloghan, Omey, Crua, &c. Bosin was famous in the days of monastic sanctity, and has retained its ancient appellation. To the N. E. are the Inisture, and another Clare at the mouth of Clew bay ; at the bottom of which is a numerous group of small islands. To the north is Achill, the largest of the Irish isles, being about 12 miles long by 10 broad. It is separated from the coast of Mayo by a narrow channel, but no minute description of it has appeared. Inisnorry is a small isle at the mouth of the bay of Donegal ; and no other isles worth mention appear till we arrive at the northern islands of Arran, off the coast of Donegal. The N. W. extremity of Ireland is marked by Tory isle ; and returning towards the east, we meet with Inistrahull ; and after an equal distance, Rachlin, the Racina, of Ptolemy, and memorable as the retreat of Robert I. of Scotland.

* Kirwan Min. i. 232.

LAPLAND.

EXTENT, DIVISIONS, ORIGINAL POPULATION, RELIGION, GOVERNMENT, POPULATION, LANGUAGE, TOWNS, MANUFACTURES, CLIMATE, FACE OF THE COUNTRY, RIVERS, LAKES, MOUNTAINS, BOTANY, ZOOLOGY, MINERALOGY.

Extent.] LAPLAND reaches from lat. 65, N. to the North Cape ; and from the Atlantic on the W. to the government of W. Bothnia, in the south, and farther north to the White Sea, on the E.

Divisions.] Part of Lapland is in Norway, part in Sweden, and part in Russia. To Norway belong the northwestern and northern ; to Sweden the southern ; to Russia the eastern.

Original Population.] Very little is known with certainty of the origin of the Laplanders. Some writers have supposed them to be a colony of Finns ; others have thought that they bore a stronger resemblance to the Samoeids of Asia. Their language is said, by Leems, to have less similitude to the Finnish, than the Danish to the German ; and to be totally unlike any of the dialects of the Teutonic.

Religion.] It is but little more than a century since the Laplanders were converted from Paganism. They are still very fond of many of their old superstitions. Their deities were of four kinds ; 1, SUPERCELESTIAL, *Radien Atzhie*, or the fountain of power, their Jupiter ; and his son *Radien Kiedde*, the creator : these were the supreme gods. 2, CELESTIAL, *Beiwe*, the Sun or Apollo ; and *Ailekes*, to whom Saturday was consecrated. 3, SUBCELESTIAL, or in the air and on the earth ; *Maderakka*, or the Lapland Lucina ; *Saderakka*, or Venus, to whom Friday was holy ; and *Juks Akka*, or the nurse. 4, SUBTERRANEAN, *Saiwo*, and *Saiwo-Olmak*, gods of the mountains ; *Saiwo Guelle*, or their Mercury, who conducted the shades to the lower regions ; *Jabme Akko*, or he who occupied their Elysium, in which the soul was furnished with a new body, and nobler privileges and powers, and entitled at some future day to enjoy the sight of Radien, and dwell with him for ever in the mansions of bliss. *Rota*, their Pluto, who occupied and reigned in *Rota-Abimo*, or the infernal regions ; the occupants of which had no hopes of an escape ; he, together with his sub-ordinates, *Fudno*, *Mubber* and *Paha Engel*, were all considered as evil-disposed towards mankind, but were nevertheless worshipped. To their various deities they sacrificed the rein-deer, the sheep, and sometimes the seal ; and made libations of milk, whey and brandy, and offerings of cheese.

Government.] The Danish and Russian Laplanders are still savages in their mode of life, and hardly know what is meant by government. Those of Sweden have been reduced to more subordination.

Population.] This country will always be thinly inhabited. Its present population is thought not to exceed 60,000. Russian

Lapland contains about 1200 or 1300 families. The Laplanders are generally about four feet high, with short black hair, narrow dark eyes, large heads, high cheek bones, wide mouth, thick lips, and a swarthy complexion. They call themselves *Same*; their speech, *same giel*, and their country *Same-Edna*.

Manners and Customs.] Towards the shore they build huts; and on the mountains are tents of a conical shape, divided into apartments for themselves and their cattle. Their dress consists of a red kersey cap, with yellow stripes; a tunic of sheep-skin; a cloak and leggins, (a sort of pantaloons reaching from the ankle to the hip,) made sometimes of cloth, and sometimes of the skin of the reindeer; and shoes of the undressed hide of the cow. The maritime Laplanders subsist on fish, and on their cattle and sheep; the mountaineers, chiefly, on their reindeer and by hunting.

Language.] The language of Lapland, commonly called the Laponic, is said to have no words in common with the Gothic or Teutonic, except a few Norwegian words, which are evidently foreign. They have no written language. Leems mentions a number of words both in Hebrew and in Greek and Latin, which are to be found in the Laponic. The Lord's prayer is as follows:

Atki mijam juco lee almensisne. Ailis ziaddai tu nam. Zweigubatta tu Ryki. Ziaddus tu Willis nankuchte almesne nau ei edna mannae. Wadde mijai ulni mijan fert pefwen laibebm. Jah andagasoite mi jemijan suddoi naukuchte mije, an-dagasloitebt Rudi mije welgogas lien. Jah sissalaidi mijabni. Ele tocko keckzellebma phahast. Amen.

Towns.] *Kola* is the chief town of Russian Lapland. It is near the Frozen Ocean, on the river Kola, in lat. 68, 50, N. It is a considerable fishery for whales and sea-dogs.

Tornea, the capital of Swedish Lapland, stands on an island formed by the river Tornea, a short distance from its entrance into the Gulf of Bothnia. Its harbor, formerly excellent, has been greatly injured by the accumulation of sand, and the gradual depression of the Baltic. It contains about 600 souls: the houses are all of one story. The sun on the longest day is visible at midnight.

Enontekis is an extensive parish in Norwegian Lapland, containing 930 inhabitants, principally *nomades* or wandering families.

Manufactures.] The men make cups and casks of beech-wood, and spoons of the horns of the reindeer. Steel they work into knives. Their sledges are made in the shape of boats, having a flat stern. They have a keel and thwarts, with side planks fastened with wooden pegs. The sledge is caulked, and has the drawing rope fastened to the head-post. Sawing-mills have been lately introduced. The women prepare the furs of animals taken in hunting; and manufacture thread out of their sinews. They manufacture also tinsel-wire, and dye cloth of a yellow color. They weave blankets for their beds, and for their tents.

Climate.] The great body of Lapland is situated in the northern frigid zone. It is also very mountainous. These circumstances expose it to a cold too intense to be borne by the natives.

of more temperate regions. In the summer, however, the heat is, for a short time, often excessive. The whole process of vegetation is completed in two months. At *Utsjocki*, upon the *Tana*, in lat. 69° 53' N. the sun is hid from Jan. 21 to Nov. 20. The ice disappears from the lakes about June 20th. The night-frosts begin in July ; and the rivers freeze early in October.

Face of the Country.] Norwegian Lapland is almost entirely mountainous, the principal range being much nearer to the Ocean than to the Gulf of Bothnia. The prevailing appearance of Swedish Lapland is also mountainous. The mountains of moderate elevation are covered with forest-trees, as is almost all the level country. There are great numbers of rivers and fresh water lakes generally incapable of navigation, and the country at large has the appearance of a wilderness.

Between Alten, on the western coast, and the North Cape, the peninsula is a continuation of mountains, intersected by lakes, rivers and morasses.

Rivers.] The *Tornea* rises in a lake, called *Tornea Trask*, in the mountains of Kola. It receives the *Muonis* a mile below Kengis, which rises above *Enontekis*. Near its mouth it is generally 900 yards wide, and in some places 10 yards deep.

The *Alten* rises among the same mountains, and after a course of more than 150 miles in a N. W. direction, falls into the Ocean at Alten.

The *Tana*, a larger stream, pursues a N. E. direction, and empties into the *Tanafard* east of the North Cape. It is extremely rapid, and distinguished for the excellence of its salmon. Its source is among the mountains of Kemi, a chain which is not broken by any of the rivers.

Lakes.] The number of lakes and ponds in Lapland is very great. They are to be met with every where among the mountains, and are the sources of most of the rivers. Several of the rivers also widen into lakes, in one or more instances, during their course. The *Enara*, between Swedish and Russian Lapland, is 70 miles long and 30 broad.

Mountains.] A chain of mountains is described by Tooke, as proceeding eastward from the range of Kolen, till it meets the mountains of Olonetz. This chain is called, on the maps, the Mountains of Kemi. It reaches more than 15 degrees of longitude, and divides the rivers of the Baltic from those of the Arctic Ocean. The only summit of this chain, whose name we know, is Mount Pallas. Its height is very great, but has not been measured.

The range of Kolen separates Norwegian Lapland from Swedish, and continues as far as the North Cape. A branch of it is said to run eastward, as far as the White Sea.

Botany.] Between Alten and the North Cape no tree is found but the birch ; nor on the mountains north of Kautokeino 100 miles farther north. The pine begins at Alten on the coast, and at Kautokeino in the interior. The fir, five varieties of the wil-

low, and the strawberry-tree are abundant in the country round Tornœa.

The smaller plants are butterwort, meadowgrass, bellflower, gentian, cychnis, cudweed, ladyslipper, diapensia, honeysuckle, sedge, bulrush 2 varieties, stichwort 3, marshcistus 3, saxifrage 4, raspberry 2, crowfoot 3, lousewort 3, whitlowgrass 3, liverwort 4, moss 5. The arctic raspberry is the most delicious of its kind, and has a very agreeable and penetrating smell.

Zoology.] The rein-deer is the pride of Lapland. It is four feet six inches high; body thick, and somewhat square; legs short; color brown above, and white beneath. The horns are long and slender. The hoofs are large, and make a clattering noise as they move. It is one of the fleetest animals known. The tame ones draw the sledges 200 miles a day; feeding in summer on leaves, and in the winter on moss. Their flesh is well-tasted, their milk and cheese nutritive and pleasant; their skins furnish excellent clothing for the bed and the body; and their intestines and sinews form strong thread and cordage. Cows, sheep, goats, and dogs are also among the domestic animals of the Laplanders.

Bears are very numerous. Red, black, silver-haired and white foxes are found in very great numbers. Of martens there are the stone marten, the birch marten, and the fir-marten. The glutton is rather uncommon; the beaver more frequent. Three species of otters abound, the sea-otter, the bay-otter, and the fresh-water-otter. There are also immense numbers of ermine and mice, and great numbers of squirrels. Notwithstanding the rigor of the climate, animals both wild and tame are remarkably prolific. Seals are found all along the northern and western coasts.

Eagles, falcons, pelicans, cormorants, owls, ravens, swans, daws, partridges, the eider-duck, sea-crows, wild geese, water-hens, snipes, woodcocks, magpies, bustards, plover, thrushes, snow-birds, linnets, gold-finches, and siskins, are common birds in Lapland. Pigeons, doves, and cuckows are here occasionally. The forests abound also with fine singing birds. Many, both of the birds and beasts are of kinds peculiar to the country.

Salmon abound in the rivers; cod, hake, ling, haddock, whiting, skate, turbot, flounder, and halibut are caught in great numbers on the coast and prepared for exportation. Whales appear in astonishing numbers early in February. There are several varieties of the shark. The sword-fish, springer, and porpoise are very numerous. Herrings are in immense profusion; but the Laplanders have not yet learned how to take them. The story of the *Kraken*, a marine animal several miles in length, is on the same footing with the narratives of hobgoblins.

Minerals.] Baron Hermelin, the celebrated Geographer of Sweden, Finland, and Lapland, has discovered the following among the minerals of the latter country.

1. *Stones.* Of the calcareous kind, limestone, calcareous spar, scaly limestone, sidero-calcite, marble, gypsum, and lime with garnets; of the siliceous, quartz, rock crystal, amethyst, garnet, black and common jasper, shorl, zeolite, hornstone, siliceous

schistus, felspar; of the muriatic steatite, serpentine, chlorite, asbestos, amianthus, asbestos; of the barytic, ponderous spar; of the argillaceous, trap, hornblendmica, aluminous earth, wacken, and clay containing iron; of aggregates, serpentine rock, norka, amygdaloid, porphyry, breccias, sandstones, gneiss, puddingstone, granitell.

2. Inflammable substances. These are plumbago, native sulphur, martial pyrites.

3. Metals; lead, zink, iron, antimony, copper, arsenic, molybdena, and gold, once found at Svappawara in Torneo Lapmark. There are no less than twelve mines of the different metals enumerated; but we do not know their kinds, or their value.



DANISH EMPIRE.

1. IN EUROPE.

1. Kingdom of Norway. 2. Kingdom of Denmark. 3. Ferro Islands.

2. IN AMERICA.

1. Iceland. 2. Greenland.

3. IN ASIA.

Three of the Nicobar Islands are said to belong to Denmark.

4. IN AFRICA.

Christiansburg and Freidensburg, two settlements and fortresses on the coast of Guinea.

Denmark till lately possessed St. Croix, St. Thomas, and St. John's, in the West Indies; Serampore in Bengal; and Tranquebar in Coromandel. These have been taken by the British.



NORWAY.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, BOUNDARIES, DIVISIONS, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, RELIGION, GOVERNMENT, LAWS, POPULATION, ARMY, REVENUE, MANNERS AND CUSTOMS, LANGUAGE, EDUCATION, CITIES, ROADS, COMMERCE.

Names.] THIS country is a part of the ancient Scandinavia. Its present name, Norway, formerly written *Norwick*, is said to denote the *Northern Kingdom*. The natives now call it *Norgie*.

Extent.] Its length from the *Naze*, in 58 N. to North Cape, in 71 10, is 1000 miles. Its width, in lat. 59, is 210 miles; in lat. 61 20, about 235; and north of lat. 63, it is rarely more than 80. On the north of Sweden it extends considerably east of the North

Cape until it meets Russian Lapland. It contains, according to Hassel, 152,680 square miles. In lat. 65 N. the Swedish province of Herndahl pushes westward to the sea, and breaks the continuity of the Norwegian coast.

Boundaries.] Bounded N. by the Frozen Ocean; E. by Russian Lapland, and also by Sweden, from which the northern half of the country is separated by a lofty chain of mountains; S. by the Scaggerac; and W. by the Atlantic.

Divisions.] Norway is naturally divided into two parts, Northern and Southern.

Northern Norway is a long narrow slip of land, reaching from the North Cape to the narrow Swedish province of Herndahl, which, between lat. 65 and 66, separates it from Norway proper. It is divided into Nordland, Finmark, and Lapmark, all under the government of Drontheim.

Southern Norway, which is the great body of the country, reaches northward to about lat. 65, N.

Norway is politically divided into four governments.

1. DRONTHEIM in the N. 92,406 square miles.*

Counties.

Lapmark,	Vaerdals,
Finmark,	Saelbo,
Nordland,	Guledal,
Nummedal,	Northmoer,
Indero,	Romsdal.
Fosen,	

2. BERGHEN in the W. 16,000 square miles.†

Counties.

Southmoer,	Vosse,
South Bay,	Hardanger.
Sogne,	

3. AGGERHUUS, in the E. and S. 29,808 square miles.‡

Counties.

Eastdal,	Romerige,
Gulbrandsdal,	Buskemds,
Hedemarke,	Christiania,
Valder,	Sandsvaer,
Ringerika,	Rakestad,
Toten,	Tarlsberg,
Solloer,	Bamble.

4. CHRISTIANSAND, in the S. W. 14,466 square miles.§

Counties.

Tellemarkens,	Lister,
Delagets,	Mandals,
Ryffylke,	Nedenaes.
Dalernes,	

Original Population.] The original possessors of Norway appear to have been the Fins and the Laps, who were driven to the northern extremities by the Gothic Invasion, conducted by Odin. The population has since continued pure and unmixed by foreign

* Hassel.

† Hassel.

‡ Hassel.

§ Hassel.

conquests, and the inhabitants still retain the muscular frame, blooming countenance, and yellow hair of the Normans, so well known in France, Italy, and England.

Progressive Geography.] The early Geography of Norway is very obscure. There is reason to believe, that no part of it, except the southern extremity, had been seen by the Roman mariners. Few materials even afterwards arise for the progressive geography of this country, till the time of Jormandes ; whose account is succeeded by the navigation of Ohter, and the description by Adam of Bremen, in the eleventh century.

Historical Epochs.] 1. The original population by the Fins and Laplanders.

2. The conquest by the Goths.

3. The consolidation of all the petty monarchies into one, by Harald Harfagre, about A. D. 910. Many of the petty princes left the Kingdom. Ganga Hrolf, or Rollo the Walker, went to France ; and, in 912, subjugated the province, which, from him, and his followers, the *Normen* was called Normandy.

4. The conversion of the country to Christianity, in the reign of Olaf I, A. D. 994.

5. The invasion of England by Harald III. who was slain in a battle with Harold, King of England, Sept. 25th, 1066.

6. Its union with Sweden, under a common sovereign, at the death of Hagen V, A. D. 1319.

7. Its union with Denmark and Sweden under Olof V, the husband of Margaret, A. D. 1380.

Religion.] The Lutheran is the established religion, and the great body of the inhabitants profess it. Norway is divided into 4 Bishopricks ; 1, Christiana, the bishop of which is a metropolitan, though without the title of archbishop ; revenue £400 sterling. 2, Christiansand, revenue £600. 3, Berghen, revenue £400. 4, Drontheim, revenue £400. The inferior clergy are provosts or archdeacons, parish priests and chaplains. Each diocese is divided into districts, under the care of provosts ; each district into parishes. A large parish, beside the principal church, has one or more chapels of ease, under the care of chaplains. The livings vary from £200 sterling to £60. A clergyman's widow is entitled to his salary for the year following his decease, and to a pension from his successor of one eighth of the annual income.

Government.] Norway is a province of Denmark. The viceroy, who is also the governor of Aggerhus, resides at Christiania. He presides in the high court of Justice, which is held at that place. Inferior governors are appointed in the other three governments.

Laws.] The Code called *Norway Law*, compiled by Grieffel-field, at the command of Christian V, is still in full force. By it all the peasants of Norway, except a few near Frederickstadt, are made free.

A curious custom prevails, called *odel's right*, or the *right of inheritance*, by which the proprietor of freeholds may re-purchase an estate, which he or his ancestors have sold. To enforce it,

however, he or his ancestors must have asserted their claim every tenth year, at the sessions ; and likewise their inability to re-purchase it at that time.

Population.] Coxe estimated the population of Norway at 750,000. By a census taken in 1802 it amounted to 910,074 ; and Hassel, in 1809, estimated it at 912,000, which is probably less than the truth, for the births are to the deaths as $23\frac{1}{2}$ to $17\frac{1}{2}$.*

The population of Northern Norway, in 1769, was only 5,984.

Army.] Norway maintains its own army, which consists of 32,053 infantry, and 10,478 cavalry. Every peasant, not born in a town or on some noble estate, is, by birth, a soldier, and enrolled at the age of 16. Till 26 he is classed in the young militia ; then he enters into the old militia, and is discharged at 36. The troops are esteemed for their bravery, and much attached to their country. The horses of the cavalry are small, but strong, active, and hardy. These troops take the field every year in June, and remain encamped about a month.

Beside these, a regular militia has been enrolled since 1801, who are to fly to arms at a moment's warning. Their number is 40,000.

Revenue.] The revenue annually raised by Denmark from Norway was, in 1809, 1,725,000 guilders,† which at 40 cts. the guilder‡ is \$690,000. This is raised from the land-tax, customs, excise, and licenses granted by government.

Manners and Customs.] The common food of the peasants is milk ; cheese ; dried or salted fish ; oatbread, which they bake but twice a year ; and, very rarely, a little flesh or dried meat. In times of scarcity they eat the bark of the fir, ground to a powder, and mixed with oat meal. The potatoe has been lately introduced ; but it grows only of a moderate size.

The Norway houses are generally of wood. Those of the peasants have an opening in the top, which serves instead of a chimney, and windows. This hole is open in summer and is covered in winter with the membrane of some animal. The ceiling is about 8 feet high, and arched like a cupola. The family table stands directly under this opening. Their dress consists of a flapped hat, or cap, ornamented with ribbands ; a wide loose coarse jacket, with waistcoat and breeches of the same ; a broad leathern belt round the body, adorned with brass plates and a brass chain that sustains a large knife, gimlet, and other tackle ; shoes without outer soles, and in the winter leathern buskins, also skates and snowshoes. They are taught in youth to wrestle, ride, swim, skate, climb, shoot, and forge iron. Their amusements are making verses, blowing the horn, playing on the guitar and violin, and dancing.

The Norwegians are tall, well formed, robust, brave, honest, hospitable and ingenious ; yet savage, rash, and litigious. They make excellent soldiers and sailors.

* Coxe.

† Hassel.

‡ The guilder of Saxony is 51 cents 85 mills. If Hassel's was the Saxon Guilder, the revenue will have been more, of course.

Language.] The original language of Norway was that which is called the *Icelandic*, the purest dialect of the Teutonic or Gothic. The inhabitants now generally speak an intermediate dialect of the Teutonic, between the Danish and Swedish. The gentry and inhabitants of the principal towns, however, speak a purer Danish, than is usual even in Denmark.

Education.] Each parish is provided with two or three schools, where children are taught reading, writing, and arithmetic. The masters have £12 sterling *per ann.* a house, and some other advantages. Four Latin schools are maintained at the expense of the crown. In these are taught the Latin, Greek, and Hebrew. There is also a seminary for the Laplanders at Berghen. Norway has always been behind the other countries of Europe in literature. Till lately she could not boast a single native writer.

Cities and Towns.] Berghen, the capital, in lat. 60° 23' N. long. 5° 33' E. was founded in 1070. It is a sea-port, seated in the centre of a valley, and forming a semicircle round a small gulf of the sea, called, by the inhabitants, *Waag*. The public buildings and many of the houses are of stone. Its trade is in fish, fish-oil, tallow, tar, hides and timber. The returns are corn and foreign merchandise. It was formerly connected with the Hansetowns, and to them it owes the rise of its commerce. It has been exposed to frequent conflagrations. The population is estimated at 19,000. The harbor is one of the best in Europe.

Christiania, in lat. 59° 6' 37", stands in a semicircular form on the northern extremity of the gulf of Christiania, 30 miles from the open sea. The navigation of the gulf is sometimes difficult; but it is deep enough for the largest ships, having 6 or 7 fathom close to the quay. Its shores are rocky, and overspread with thick forests. The country around Christiania is fertile, but uneven. The town is divided into, 1st, the city and the three suburbs of Waterlandt, Peterwigen and Fierdingen; 2d, the fortress of Aggerhuus; 3d, the old town of Opsloe or Ansloe. The city contains 418 houses, the suburbs 682, and Opsloe 400: total 1500. Population 10,000. The fortress is small but strong. The harbor is excellent, and the trade considerable.

Drontheim, formerly Nideros, stands on the estuary of the Nid, in 63° 26' 2" N. It was built in 997; and is, except Tornea, the most northern city in Europe. It was the residence of the ancient kings of Norway, and afterwards an archbishoprick, suppressed at the reformation. There are two churches, a public school, a seminary for missionaries, an orphan house, a poor-house, an infirmary, and a house of correction. Its inhabitants are 9000 in number. From 400 to 500 ships are employed in its trade annually; and the principal exports are salt-fish, herrings, timber, tallow, and copper, from the celebrated mines of Roruaas. It is 285 miles N. N. E. of Berghen.

Christiansand, in lat. 58° 12' N. on the Torisdal, contains about 4000 inhabitants. Christiansund, in 63° 10' is about equally populous. Kongsberg, on the Louven, 40 miles S. W. of Christiania,

contains 1000 houses and 6000 inhabitants. Two miles from it are the celebrated silver mines.

The population of Frederickshall, in lat. 59° 4', N. is about 5000. On a rock, which overhangs the town, is the hitherto impregnable fortress of Frederickstein, rendered memorable by the death of Charles XII. of Sweden. The houses are of wood, generally painted red; and the harbor is safe and commodious.

Roads.] The roads of Norway are extremely rugged and almost impassable with carriages.

Commerce.] The trade is principally passive, and is carried on in Danish ships. The exports are fish, timber, lumber, furs, horses, horned cattle, fish-oil, tallow, butter, copper, hides, marble, millstones, iron, silver, tar, alum, salt, pot-ash, and Prussian-blue. Corn and all kinds of manufactures are imported. The Norwegians are the best seamen in the Danish fleet.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, MINERALOGY, NATURAL CURIOSITIES, ISLANDS.

Climate and Seasons.] THE greatest quantity of snow falls before the middle of January; and of rain, in April, August, and October. March, June, and July, are usually clear. The most violent winds occur in April, May, and October. The sea is always open at Berghen. The south winds prevail on the western coast. On the east side of Norway the cold is intense, snow usually lying from the middle of October, to the middle of April. In 1719, 7500 Swedes were frozen to death in their march over the mountains, to the attack of Drontheim.

Face of the Country.] This is probably the most mountainous country in Europe. In the north, all is mountains; but, in the south, there are tracts of great fertility, and, though often rocky, the soil is rich. "The face of the country is prettily sprinkled with numerous lakes and rivulets, and thickly dotted with cottages, rudely, though not unpleasantly, situated on rocky eminences in the midst of the luxuriant forest."

Soil and Agriculture.] There is little arable land, and most of the corn is imported from Denmark. The pasture is excellent and abundant; and great numbers of cattle and horses are annually raised. The agriculture is improving.

Rivers.] The Glamme, the largest river of Norway, rises from Lake Oresund on the north of Lake Foemund, and runs nearly south, about 300 miles, to Sarp, near Frederickstadt. About 80 miles from the sea it receives the Worm, which runs through Lake Mioss, and is almost as long as the Glomme. Before the confluence it is as large as the Thames, at Henley. It is wholly unnavigable, and full of shoals and cataracts; yet about 50,000 trees are annually floated upon it to Frederickstadt. The Dramme

flows into the west side of Christiania Bay after its confluence with the Beina. The Louven and the Torrisdal in the S. are smaller. The western rivers are all short and rapid. The Tana and the Alten are the largest streams in Northern Norway.

Lakes.] These are numerous, but not very extensive. Lake *Moss* is 60 miles long, and near the middle from 12 to 18 miles wide, but generally narrow. It contains an island 10 miles in circumference, fertile in corn, pasture, and wood. Lake *Rands* is 50 miles long and 2 broad. Lake *Folmund* is 35 miles long and 8 broad, and surrounded by mountains of great height. Lake *Tyri* is a beautiful piece of water, about 15 miles in length and breadth, diversified with many bays and creeks.

Mountains.] The mountains of Norway, though constituting a united chain, receive different names in the different provinces. The southern part of the chain commencing near Cape Lindes, or the Naze, and running almost due N. to the province of Romsdal, is called *Langfjall*, or the *Long Mountains*. Here it bends eastward, till it reaches the frontiers of Sweden, above Lake Oresund, in about 63 N. This part of it is called *Doffrefjall*. The third, and far the longest part of the chain, passes from near Oresund, in a N. N. E. course, between Norway and Swedish Lapland, to about lat. 69 ; where it bends in the form of a horse-shoe on the south of Finmark, and probably unites with the mountains of Olonetz in Russia. This is called the chain of *Kolen*. These three united chains are properly called the *Norwegian Range*. Its length is not less than 1100 miles. At the last mentioned bend a branch divides, and proceeds southerly by Swucku through Sweden. Areskuten, in the Kolen chain, near Jemtland, is said to be 6162 feet above the level of the nearest rivers. The two highest summits in Norway are said to be Doffrefjall, in Drontheim, and Tille in Berghen. *Swuckustoet*, one of the summits in the Swedish branch, yet within the borders of Norway, is said to be 4658 feet above the waters of Lake Falmund, which are thought to be 2000 or 3000 above the sea.

Forests.] Most of Norway is forested. The humbler mountains are entirely covered with trees ; while, on the more lofty, no trees will grow at a little more than half their height. The pine and the fir are most common. The birch and oak are abundant. The elm is rare. The forests of Norway are used for several purposes. 1, For ship building. 2, For charcoal. 3, For building houses. 4, For making roads. 5, For turpentine. 6, For fencing. 7, For fuel. 8, For making ashes for a manure. This last application is very extensive and extremely destructive to the forests.

Botany.] See Botany of Sweden.

Zoology.] The horses of Norway are very small, but strong and patient of fatigue. The reindeer abounds in Finmark and throughout Lapland. They are used by the inhabitants in place of horses. The elk, the bear, the wolf the lynx, the fox, the hare, and the beaver, are found in more Southern Norway. The lemming, or Norwegian mouse, proceeds from the ridge of Kolen,

and sometimes spreads desolation like the locust. Norway boasts of the eagle ; and its falcons are reckoned the boldest and most spirited of Europe. Salmon are abundant in the rivers and lakes.

Mineralogy.] About the year 1645, some gold ore was found near Arendal on the coast of Christiansand. At Kongsberg are the richest silver mines in Europe. One mass of native silver in the royal cabinet at Copenhagen, taken from these mines, weighs 409 marks, and is worth £600 sterling. The rock consists of vertical banks of micaceous schistus with garnets, limestone, and quartz. The veins of metal are from half an inch to more than two feet in thickness. There were 36 mines working in 1780, the deepest 652 feet perpendicular. The annual produce is £54,000 sterling, and the number of mines 2500. The expenses of the establishment often equal the income. The principal advantage derived from them is to supply the treasury with specie. These mines were discovered by two peasants, in 1623. There is a silver mine of much less value at Sarlsberg, about 30 miles S. E. of Kongsberg.

The copper mine of Roraas, about 68 miles S. E. of Drontheim, near the source of the Glomme, was discovered in 1644. The veins are from 6 inches to 6 ells in thickness, and the ore of a pale yellow. In general the mines of Roraas are very productive, and a source of considerable revenue. The annual produce is about 1100 ship-pounds of pure copper. The foundries belonging to it consume yearly 1400 lasts of coal, and 500 fathoms of wood. There are other copper mines at Luckens, 20 miles S. of Drontheim ; at Seiboe, 30 miles S. S. E. of that place ; and at Quickne.

At Skaterud on the Dramme, 26 miles N. of Kongsberg, is a valuable mine of cobalt, on the top of a mountain, discovered about the year 1780. There are really two mines ; each with four shafts or openings, the deepest only 84 feet, because the ore is still in great plenty near the surface. A fine quarry of quartz lies near them, which is mixed with the cobalt, to make the Prussian blue. The quartz is as white as alabaster, and contains large veins of Russian talc or marien glass. The number of miners is 360, and the produce 3000 weight of cobalt, yielding a net profit to the crown of £16,000 sterling.

But the iron mines of Norway are the most profitable. The richest are those of Skeen, about 30 miles S. of Kongsberg ; and those of Ayendal, about 56 S. W. of Skeen. Many hundred thousand quintals are annually exported, chiefly in bars ; part of it also in stoves, pots, kettles and cannon. The national profit arising from this metal is thought to be £60,000 sterling *per ann.*

Lead and sulphur are found near Kongsberg. Alum is found abundantly between the slate-flakes, near Christiania. Royal salt-works are established on the peninsula of Valoe, 6 miles from Tonsberg.

Norway contains inexhaustible quarries of excellent marble, black, white, blue, grey and variegated ; likewise alabaster, chalk-stone, cement stone, sandstone, millstone, bakingstone, slate, talc, magnets, asbestos, quartz, crystals, amethysts, and agates

in great abundance ; together with curious garnets, especially the green, which are little known in other regions.

Natural Curiosities.] The *Moskocstrom*, or *Malstrom*, is a remarkable whirlpool off the coast of Nordland, near the little island of Moskoe, one of the Loffoden islands. It is occasioned by the very rapid ebb and flood of the sea between Moskoe and Lof-foden. About a quarter of an hour, at high and low water, it is quiet. But, when the tide is rising or falling, the sea boils with immense agitation ; its roar is heard to the distance of many leagues ; and the force and extent of the vortex is so great that ships 3 miles off are sometimes forced towards the centre and finally dashed in pieces against the bottom. Whales are frequently absorbed by it in spite of their endeavors to escape. Large trees are often sucked down, and rise again all shattered into splinters.

About 20 miles north of Berghen the rocks abound with singular petrifications. The mountains are sometimes split and engulfed by subterranean waters. The farm of Borre, in the province of Christiania, was, in 1703, swallowed up with all its buildings ; and there now remains only a chasm full of ruins and sand.

Islands.] The coast presents a continued series of small islands, generally mountainous and craggy, with precipitous rocks, and a sea from 100 to 300 fathoms deep washing their bases. Between them are numerous creeks, overshadowed by the precipices, and guarded by numberless little islands of rock haunted by sea-fowl. Among the largest are Hitteren, Karm, Bommel, Sartar and Smolen, near the entrance of the gulf of Drontheim. In lat. 65 arc the Vigten islands ; and between 67 and 69, the Loffoden isles, the most numerous and extensive cluster. Scroe is a little S. W. of North Cape, which is on the island of Mageron ; and Wardhus is in the Arctic Ocean, near the Bay of Warangher. On this last there is a Danish garrison.

DENMARK.

CHAPTER I.

HISTORICAL GÉOGRAPHY.

**NAMES, EXTENT, BOUNDARIES, DIVISIONS, ORIGINAL POPULATION,
PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, ANTIQUITIES.**

Names.] DENMARK was a part of ancient *Scandinavia*. Its appropriate name was *Chersonesus Cimbrica*, or the Peninsula of the Cimbri or Cimmerii. The name *Denmark*, implying the marches, boundaries, or territories, of the Danes, is derived from the inhabitants, who are first mentioned by this appellation in the 6th century, when we begin to acquire a faint idea of Scandinavia from the history of Jornandes.

Extent, Boundaries, and Divisions.] As the large islands Zealand and Funen, make an integral part of the kingdom, we shall incorporate our account of them with the geography of Denmark. The kingdom is composed of the following territories.

		Square miles.
In the peninsula of Jutland.	1, Aalborg,	2668
	2, Aarhuus,	2547
	3, Riperhuus,	3326
	4, Wiborg,	721
	5, Schleswick,	3530
	6, Holstein,	3156
		15,948
Islands.	7, Zealand,	2884
	8, Funen,	1938
		20,770

The Peninsula reaches from Altona, on the Elbe, in lat. 53° 35' N. to the Skaw, in lat. 57° 45', 290 miles. Its breadth varies from 35 to 105 miles ; and its extreme meridians are 7° 55', and 11° 5'. The estuary of the Elbe lies on the S. W. ; the Duchy of Saxe Lauenburg in Germany on the S. E. ; the Baltic on the E. and N. ; and the German Ocean on the W.

The island of Zealand is 80 miles long, from N. to S. ; and from 40 to 60 broad. It is extremely indented with bays and harbors, so that its circumference is about 700 miles.* The Sound, in the narrowest place 3 miles wide, separates it from Sweden ; and the Great Belt on the W. divides it from the island of Funen, the nearest point of which is 18 miles distant from Zealand.

Funen is separated by the Little Belt from the Peninsula. The distance from Assens to Arroesound, is 9 miles ; but between MiddlefARTH and Snoghey it is not quite 2. Funen is 50 miles long, and 30 broad ; and, owing to its numerous bays and headlands, 340 miles in circumference.†

Original Population.] The original population of Denmark appears to have consisted of Cimbri, or Northern Celts, the ancestors of the Welch ; and who in particular held the Cimbric Chersonese, or modern Jutland and Sleswic. On the progress of the Goths from the N. and E. the Cimbri were expelled. Yet the Chersonese continued to retain their name, while possessed by seven Gothic tribes, among which were the Angli, who afterwards gave appellation to England, and who appear to have resided in the eastern part of Sleswic, where there is still the province of Anglen.

Progressive Geography.] The progressive geography of Denmark may be traced with some precision from the first mention of the Cimbric Chersonese by astonished Rome. Tacitus describes the *Suiones*, ancestors of the Danes, as constituting states situated in the sea, that is in the islands of Zealand, and others which still form the seat of Danish power.‡ He adds that they had fleets,

* Coxe.

† Coxe.

‡ Germ. c. 44.

their ships being of a singular form, capable of presenting either end as a prow ; that they had acquired wealth, and were ruled by a monarch. The progressive geography of Denmark may afterwards be illustrated from various passages, especially from Jornandes, and the Francic historians, till Adam of Bremen, in the eleventh century, gave a minute description of the country, and their own historian *Saxo Grammaticus* composed his classical work about the year 1180.

Historical Epochs.] 1. The most ancient population of the continental part of Denmark by the Cimbri.

2. The conquest by the Goths, who appear to have proceeded from Scandinavia into the isles and Jutland, as the dialect differs greatly from the German Gothic, while it is a sister of the Swedish and Norwegian.

3. The Roman and Francic accounts of Denmark, from the time of Pliny and Tacitus to that of Charlemagne.

4. The fabulous and traditional history of Denmark, which extends from about the year of Christ 500, to the reign of Heriold, mentioned by the Francic historians in the time of Charlemagne.

5. The conquest of Denmark by Olaf II. king of Sweden, about the year 900.

6. The more certain history commences with Gurm or Gormo, A. D. 920 ; but there seems no evidence whether he sprung from a native race, or from the Swedish, or Norwegian. Gormo is succeeded by his son Harald Blaatand 945, who is followed by his son Swein 985, well known by his invasion of England, where he in some measure usurped the sovereignty, and died A. D. 1014.

7. The reign of Canute the Great, king of Denmark, England, and Norway. The conversion of Denmark to Christianity had commenced in the beginning of the ninth century ; but Christianity was far from being universal there till the reign of Canute the Great, when it was followed by its universal consequences, the cessation of piracy and rapine, and the diffusion of industry and civilization.

8. The reign of Waldemar, surnamed the Great, A. D. 1157, who defeats the Wends, or Slavonic inhabitants of the southern shores of the Baltic, in many battles, and subdues the isle of Rügen. Hence followed slowly the conversion of Pomerania, and of the countries on the east. Waldemar is regarded as the parent of the Danish laws.

9. The marriage of Hakon VI. king of Norway, with Margaret daughter of Waldemar III. king of Denmark, A. D. 1363, produced the memorable union of the three crowns of the north. On the death of her young son, Margaret ascended the throne of Denmark and Norway in 1387, and that of Sweden in 1389. Her husband, Eric of Pomerania, reigned about 26 years after her death, and was followed by Christopher of Bavaria, who removed the royal residence from Roskild to Copenhagen.

10. The accession of the house of Oldenburg, in the person of Christiern I, A. D. 1448. The repeated revolts of Sweden were suppressed by his successor John, who was crowned at Stockholm in 1497.

11. The tyrannical and unhappy reign of Christiern II, when Sweden was emancipated by the efforts of Gustaf Wase.

12. The abolition of the Roman Catholic religion by Christiern III, 1537 ; but the Lutheran had been already introduced in 1526.

13. The reigns of Christiern IV. and his successor Frederic III, who was constrained to sign a treaty in March 1660, by which he abandoned to Sweden the valuable province of Scone, and other parts in the south of Scandinavia, which had long remained in the possession of the Danes, together with the fertile island of Rugen.

14. The memorable revolution of the 23d October 1660, by which the crown was declared absolute and hereditary. The subsequent events have been little memorable.

Antiquities.] The ancient monuments of Denmark and Norway are chiefly what are called Runic ; though it be not clear at what period the use of the Runic characters extended so far to the north. Circles of upright stones are common in all the Danish dominions. Monuments also occur of the other forms imagined by antiquaries to be Druidic.

CHAPTER II.

POLITICAL GEOGRAPHY.

RELIGION, ECCLESIASTICAL GEOGRAPHY, GOVERNMENT, LAWS, POPULATION, COLONIES, ARMY, NAVY, REVENUE, POLITICAL IMPORTANCE AND RELATIONS.

Religion.] THE religion of Denmark is the Lutheran. There is no archbishop ; but the bishopricks are six in number, viz. Zealand, revenue £1000 ; Funen £760 ; Ripen £400 ; Aarhuns £600 ; Wiborg £400 ; and Aalborg £400. The chief see is that of Zealand, which yields about £1000 a year ; the other clerical orders are provosts, or archdeacons, parish priests, and chaplains. The parochial clergy are maintained by their glebes, tithes, and surplice fees ; but in Jutland some of the livings do not exceed £20 a year.

Government.] The constitution, as established Nov. 14th 1665, is an absolute monarchy. The king, in ecclesiastical and civil matters, acknowledges no superior. He has the sole power of making and repealing laws, of forming treaties and alliances, of making war and peace, and of laying taxes ; and is the source of all titles, dignities, honors and offices. The administration of the kingdom is in the hands of a privy council, in which the king presides. Its numbers are not limited. Subordinate to this are 5 departments : 1, The Danish Chancery, superintending the courts of justice, ecclesiastical affairs, education, patents, privileges, &c. for Norway, the Isles, and N. Jutland. 2, The German Chancery, taking the same care for Sleswick and Holstein. 3, The Department for Foreign Affairs. 4, The financial college. 5, The Treasury. There is a minister at the head of each.

Laws.] The laws are, 1. Fundamental. These are, 1 *Kongs Law*, by which the king must be a Lutheran, descended by lawful

wedlock from Frederick III, and is made of age at 14 ; and 2 the *Indigenate's Law*, by which foreigners, unless naturalized, are excluded from office. 2, *Danske Law*, or the civil and criminal code, published by Christiern III, in 1683. It has often been revised, and is now much enlarged. It is concise, clear, and remarkable for its mildness and equity.

Courts.] There are three classes of courts, viz. the inferior courts, the superior courts, and the supreme tribunal.

The inferior courts are, 1, The *herretsdinge*, composed of one judge, and eight assessors, chosen from among the freeholders of the *herred*, a district of 40 or 50 parishes. 2, The *birkdinge*, similar to the courts-baron of England. 3, The *byetdinge*, or city court.

The superior courts called *Landdinge*, are five in number : one for Zealand, at Ringstaedt ; one for Funen and Langeland, at Odensee ; one for Laaland and Falster, at Marieboe ; one for Jutland, at Wyborg ; and one for Bornholm. They hear appeals from all the inferior courts.

The Supreme Tribunal of Copenhagen is the highest court of Justice, and the forum of final appeal from the courts in all the Danish dominions. It sits almost all the year, and is opened by the king in person in the beginning of March.

The process in the inferior courts is very expeditious, and the Danes are, consequently, extremely prone to litigation.

Population.] The number of inhabitants in 1780, was 1,248,932 ; in 1796, 1,490,384 ; and in 1808, according to Hassel's estimate, 1,548,000. Of these 1,030,000 are in the peninsula ; 343,000 in Zealand, including Moen and Barnholm ; and 175,000 in Funen, including Langeland, Laaland and Falsten. The population of the whole empire is as follows :

In Europe,	{ Denmark,	1,548,000
	{ Norway,	912,000
	{ Ferro,	5,300
In America,	{ Iceland, (1808)	47,300
	{ Greenland, (1806)	6,100
In Africa,	- - - - -	3,000
		2,521,700

Army.] The regular army of Denmark Proper, from the latest accounts, consisted of

Infantry,	- - - - -	28,341
Cavalry,	- - - - -	6,066
Artillery,	- - - - -	3,299
Engineers;	- - - - -	35
In garrisons,	- - - - -	710
Barnholm militia,	- - - - -	1,325
		38,776
Add the Norwegian troops;	- - - - -	42,531
		81,307

A new national militia has lately been organized, by the name of *Landvaern*. It consists of men between 36 and 45 years of age, who are to serve only on emergencies. Of these there were, in 1808,

In Denmark Proper,	59,000
In Norway,	40,000
	99,000

There are two military schools in Denmark, and one in Norway. The Danish fortresses are Copenhagen, Cronenburg, Corsoer, Nyeborg, Fredericia, Fladshand, Rendsberg and Gluckstadt.

Navy.] In October 1803, the Danish navy consisted of 19 ships of the line, 15 frigates, 8 brigs, 13 gunboats. In Jan. 1807, it was commanded by 7 admirals, 10 commodores, 40 captains, and 151 lieutenants. Soon after that time, it fell into the hands of the English.

In 1809 it consisted only of 2 frigates, 1 brig, 1 cutter, 1 schooner, 1 floating battery, 9 gunboats; in all 17, mounting 191 guns. The Danish marines are 5000 in number.

Revenues.] The annual revenue is stated by Hassel, in 1808, at 10,875,000 guilders, which at 40 cts. a guilder makes 4,350,000 dollars.* Of this sum Denmark contributes \$2,940,000; Norway 690,000; West Indies 360,000; the toll at the Sound 360,000. Deducting that from the West Indies there remains \$3,990,000. The toll of the Sound varies from \$320,000 to 720,000. The expenses are commonly less than the revenue. The debt in 1795 was \$7,500,000. It is supposed now to exceed \$12,000,000.

Political Importance and Relations.] Denmark and Norway have long ceased to be objects of terror to the southern powers, and centuries have elapsed since any of the monarchs has been distinguished in war; while the Swedes on the contrary have maintained their martial spirit. A timid policy has long united this monarchy in alliance with Russia, as a mean of security against Sweden; but more wisdom would appear in a firm alliance with Sweden and Prussia against the exorbitant power of the Russian and French empires.

CHAPTER III.

CIVIL GEOGRAPHY.

MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, UNIVERSITIES, CITIES AND TOWNS, EDIFICES, ROADS, INLAND NAVIGATION, MANUFACTURES AND COMMERCE.

Manners and Customs.] THE manners and customs of the superior Danes differ little from those of the same classes in other parts of Europe. The peasantry continue in a state of vassalage; except those of the crown, who have been

* Probably the Guilder here mentioned by Hassel, is the Saxon Guilder, which is about 51 cts. in value.

recently delivered by the patriotism of the heir apparent, and a few other instances. They are of course idle, dirty, and dispirited.

Language.] If we except the Laponic, the languages spoken in the Danish dominions are all sister dialects of the Gothic. The Icelandic is the most ancient and venerable ; and being esteemed the most pure dialect of the Gothic, has engaged the attention of many profound scholars, who have considered it as the parent of the Norwegian, Danish, and Swedish, and in a great degree of the English, though it would seem that this last is more connected with the Frisic, and other dialects of the north of Germany. In the ancient Icelandic the Lord's prayer is as follows :

Fader uor som est i Himlum. Halgad warde thitt nama. Tilkomme thitt Rikie. Skie thin Vilie, so som i Himmelam so och jo londanne. Wort dachlicha Brodh gif os i dagh. Ogh forlat os uora Skuldar so som ogh vi forlate them os Skildiche are. Oh inled as ikkie i Frestalsan. Utan frels os ifra Ondo. Amen.

In the Finnish it is as follows :

Isa meidan joca olet taiwassa. Pyhitetty olcon sinum Nimes. Lakes tulcon sinum Waldacundas. Olcon sinum tahtos niin maasca euin taiwasa. Anna meile tanaiaiwana meidan joca pawaiinen leipam. Sa anna meille meidan syndim andexi nuncuin mekin andex annam meidan welwottisten. Ja ala jahdata meita kiusauxen. Mutta paasta meita pahasta. Amen.

And thus in the Laplandic :

Atki mijam juco lee almensinne. Ailis ziaddai tu Nam. Zweigubatta tu Ryki. Ziaddus tu Willio nankuchte almesne nau ei edna mannal. Wadde mijai udni mijan fært pæfwen laibem. Jah andagascoite mi jemijan suddoid naukuchte mije andagascoiteb kudi mije welgogas lien. Jah sissalaidi mijabni. Æle tocko kækzællebma pahast. Amen.

It will hence appear that the Laplanders have borrowed some terms from the Gothic, as well as from the Finnish.

Literature.] The literature of Denmark cannot aspire to much antiquity, having followed, as usual, the introduction of Christianity, which was not established till the eleventh century. In the next century lived **Saxo Grammaticus**, whose history of Denmark abounds with fable, but whose style and manner are surprisingly classical for that age. His contemporary or predecessor, **Sveno**, is more faithful and concise, and is esteemed the father of Danish history.

After the restoration of letters Denmark continued to maintain her wonted ascendancy over Sweden : and the name of **Tycho Brahe** is yet celebrated ; but his little isle of **Hven**, noted for his astronomical observations, now belongs to Sweden. The botany of Denmark has been illustrated by **Œder** ; and **Niebuhr** is distinguished as an intelligent traveller ; but in the other paths of science and literature there seems to be a deplorable deficiency.

Education.] The silence of travellers and geographers concerning the modes of education pursued in different countries is much to be regretted ; but the materials are not equally deficient concerning Denmark. Each parish is provided with two or three

schools, where children are taught to read and write their native tongue, and the principles of arithmetic : the schoolmasters are allowed about 12*l.* a year, with a house, and some other advantages.* There are besides many Latin schools, maintained at the royal expense ; 16 in Holstein ; 11 in Sleswic ; 19 in Jutland, and the isles ; and at Soroe, Odensee, and Altona, there are superior academies of education.

Universities.] The universities are at Copenhagen and Kiel. That of Copenhagen has 4 colleges and about 600 students. It is richly endowed, and 180 poor students are supported by its funds. That of Kiel, founded in 1650, contains 24 Professors and 300 students. The royal academy of sciences was founded in 1742, but has been more distinguished in national antiquities, than natural history. In 1746 was founded the society for the improvement of northern history, also styled the royal society of Icelandic literature. There is another respectable institution at Drontheim, styled the royal society of sciences. These foundations confer honor on the Danish government ; and will doubtless contribute to diffuse science, and inspire emulation.

Cities and Towns.] Copenhagen, the chief city of Denmark, stands on the eastern shore of the large and fertile island of Zealand, about 25 British miles to the south of the noted sound, where the vessels that visit the Baltic pay a small tribute to Denmark. It is the best built city in the north ; for, though Petersburgh present more superb edifices, yet Copenhagen is more uniform ; the houses being mostly of brick, but a few of freestone from Germany.† The streets are rather narrow, but are well paved. This city only became the metropolis in 1443, being formerly an obscure port, whence it retains the name of *Kiobenhaven*, or the harbor of the merchants, and it has little claim to antiquity. The royal palace, which was a magnificent pile, was consumed by fire a few years ago : and the city suffered dreadfully from the same cause in 1728. It is regularly fortified, the circumference being between four and five miles, and the inhabitants in 1806, 97,438. The harbor is spacious and convenient, and well fortified, having on the south the isle of Amak, peopled by the descendants of a colony from East Friesland, to whom the island was granted by Christiern II. to supply his queen with vegetables, cheese and butter, a destination still retained. Copenhagen has about 440 ships, of about 48,000 tons. The number of vessels entered inwards in 1798 was 5,974. The magistrates are appointed by the king ; but the burgesses have deputies to protect their rights. It is in lat. 55° 41' 4" N. and 12° 35' 15" E.

The second city of Denmark is Altona on the Elbe, within a gun-shot of Hamburgh, originally a village of the parish of Ottensen ; but in 1640 it became subject to Denmark, and was constituted a city in 1664. In 1713 it was almost entirely reduced to ashes by the Swedes ; but its commerce was afterwards so much fostered by the Danish sovereigns, as a diminutive rival of Hamburgh, that it is computed to contain 30,000 inhabitants and 3,400

* Coxe, iv. 57 v. 187.

† Coxe, v. 126.

houses. It has 8 places for public worship, viz. 3 Lutheran churches, 2 Calvinistic, 1 Catholic, and 2 Jewish synagogues. It contains also a mint, a bank, royal exchange, and six ship yards. N. lat. 53 35.

Kiel stands on a small peninsula at the bottom of a narrow bay of the Baltic, in 54 22 25 N. and 10 26, E. Its harbor is very convenient for large ships. It contains 800 houses, and 8000 inhabitants, and is one of the most commercial places in Holstein. The canal connecting the Eyder with the Bay of Kiel has greatly increased its commerce.

Schleswick is the capital of the province or duchy of the same name, and is situated at the bottom of a very deep, narrow gulf, called the *Gulf of Sley*. It is an irregular town of great length, containing 1280 houses, and 5629 inhabitants. The houses are of brick, and resemble, in their neatness and form, those of Holland ; the inhabitants speak Dutch, German and Danish.

Odensee, a name occurring in the earliest Danish history, was a town of great note long before the existence of Copenhagen. It is the capital of the island of Funen, and stands on a small river, one mile from its entrance into the Bay of Stegestrand. Inhabitants 5363 ; houses 930. Its exports are grain and leather.

Aalborg stands about 10 miles from the Scager-Rack, on the S. side of the extensive Gulf of Lymfort. The harbor is safe and deep, and the chief exports herrings and grain. It has extensive manufactures of muskets, pistols, saddles, and gloves. Inhabitants 5,200 ; houses 831. Lat. 57 2 32 N ; Long. 10 2 11 E.

Aarhuus stands between the Baltic and a small lake, from which a river runs through the town. It has 6 gates, 2 churches, 2 markets, a college, a free school, and a hospital. Inhabitants 4900, houses 690. Lat. 56 9 35 Long. 10 19 35.

Gluckstadt, about 20 miles from the mouth of the Elbe, contains 800 houses, and 4500 inhabitants. Lat. 53 47 42 N. Long. 9 32 32 E.

Tonningen, on the Eyder, is a town of considerable commercial importance. Inhabitants 2000.

Edifices.] The chief public edifices are in the cities. The castle and palace of Cronberg, and the two other royal villas in Zealand, do not merit a particular description, the buildings and gardens being generally in an antiquated taste. The roads in Denmark were till lately much neglected, and formed a striking contrast with those of Sweden.

Inland Navigation.] The chief inland navigation of Denmark is the canal of Kiel, so called from a considerable town in the north of Holstein. This canal unites the Bay of Kiel with the river Eydar, which flows into the German sea. It commences 3 miles N. of Kiel, and is fed by the waters of Lakes Flemhuder and Wester. The extent of this important canal is about 20 British miles and a half ; from its W. end to Rendsberg $6\frac{1}{2}$, and thence to the mouth of the Eyder about 60. The breadth 100 feet at top and 54 at bottom ; the least depth is about 10 feet, so

as to admit vessels of about 120 tons. It was begun in July 1777, and was finished in 1785.

Manufactures and Commerce.] Leather is manufactured for exportation in great quantities, particularly at Altona. The leather gloves of Odensee, are famous all over Europe. The earthen ware of Aarhuus and Ripen, supplies Denmark, and many parts of Germany. The manufactures of calicoes and cottons, at Copenhagen, prevent the necessity of importation ; as do those of worsted stockings in Jutland, Ferro, and Iceland. The army is fully supplied with muskets, bayonets and sabres, by a manufactory near Elsineur ; 3500 muskets are made there annually. There is a very extensive one of cannon, cannon-balls, salt-petre, and gunpowder, at Frederickswark, near Isefjord Bay. Ribbands and silk stockings are made in great quantities at Copenhagen and Altona. Two thirds of the coarse linen and most of the sail cloth and paper is made in the country, and a considerable part of the woollen cloth ; but almost all the fine linen is imported. The thread lace manufacture of Tondern gives employment to 10,000 hands. The manufactures of Denmark have been nobly patronized by the government.

The number of merchant vessels belonging to Denmark in 1799 was 2173. The commerce with Iceland employs from 60 to 70 vessels all Danish. Greenland furnishes fish, oil, whalebones, and eider-down, but the whale-fishery is the principal object. The West India trade employed 30 ships. The imports were about 90,000 cwt. of sugar, 10,000 puncheons of rum, and 2,500 cwt. of cotton. The Danish trade in the Mediterranean is principally the carrying trade ; and employed in 1798, 126 vessels. The trade in the Baltic with Sweden, Germany and Prussia, employs about 300 vessels, and is generally against Denmark. Linens, woollens, wood, brandy and haberdashery are brought from Germany ; and corn, flax, hemp and wool from Prussia. The E. India trade is in the hands of a privileged company. It is now little or nothing. In 1803, 1536 ships cleared out from Denmark and Norway, for G. Britain, two fifths of which were British.

The exports of Denmark consist of corn to Norway, and frequently to the amount of £100,000 sterling, to other countries ; horses to Germany, France, Russia and Sweden, to the amount of £200,000 sterling ; oxen to Holland and Germany ; live hogs and bacon to Norway and the Baltic ; and salt-beef, butter, and cheese in considerable quantities, besides the various manufactures already mentioned. The great trading places are Copenhagen, Altona, Elsineur, Aalborg, Flensburg, Gluckstadt, and Colding.

CHAPTER IV.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, BAYS, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERAOLOGY, MINERAL WATERS.

Climate and Seasons.] THE kingdom of Denmark proper, consisting of those ancient seats of the Danish monarchy ; the isles of Zealand, Funen, Laland, and Falster, with others of inferior size ; and the extensive Chersonese or peninsula, which contains Jutland, Sleswic, and Holstein, may be considered as possessing a humid and rather temperate climate. Yet the winter is occasionally of extreme severity, and the sea is impeded with ice. The Sound has, at times, been crossed by heavy loaded carriages.

Face of the Country.] The isle of Zealand, which is about 200 G. miles in circumference, exclusive of the windings and indentations of the coast, in a fertile and pleasant country, with fields separated by mud walls, cottages either of brick or white-washed, woods of beech and oak, vales, and gentle hills. The same description will apply to Funen, which is about 140 G. miles in circumference, and which Mr. Marshall says is as well cultivated as most of the counties in England. Holstein and Sleswic are also level countries ; and though Jutland present many upland moors, and forests of great extent, especially towards Aalborg, or in the centre of the northern part, yet there are fertile pastures ; and the country, being marshy and not mountainous, might be greatly improved. The western coast of Sleswic is exposed to the inroads of the German ocean, and is therefore kept imbanked at a very great expense. The country generally is agreeably diversified with woods and lakes.

Soil and Agriculture.] In Funen, Holstein, and the south of Jutland the agriculture may be compared with that of England ; the fields are divided by hedges and ditches in excellent order, and sown with corn and turnips. Farther to the north, cultivation is less perfect. Hops are cultivated in Funen ; tobacco in Jutland, Zealand and Falster ; rape-seed in Sleswic and Holstein. Madder thrives very well near Copenhagen. Rye, barley and oats are found every where. But wheat is the great staple of Denmark, great quantities of which are exported. In 1780, the country contained 847,000 sheep. The best wool is that near Eyderstadt.

Rivers and Bays.] The Eyder is navigable for vessels of 120 tons 7 miles above Rendsburg, which is 60 miles from its mouth. It falls into the German ocean through the bay of Tonningen. Its source is about 20 miles S. of Kiel, and it passes through Lakes Wester and Flembuder before it joins the canal.

The Gulden runs about 100 miles, and falls into the Cattegat, a few miles below Randers.

The Elbe bounds Holstein on the S.

The *Lymfjord* or *Lymfur* is a long, narrow and navigable bay, in the northern part of Jutland, setting up westward from the Cattegat nearly across the peninsula. It is 30 miles long, and is divided by a sand bank of only two or three miles width from the German ocean. A northern arm of it approaches very near the Skager-Rack. It contains several islands, particularly *Mar*, 16 miles long and 6 wide.

Isefjord is a bay on the north side of the island of Zealand, about 30 miles long, and 25 wide, opening through a narrow strait into the Cattegat. A narrow peninsula divides it into two.

The Bay of *Ringkiobing* puts up northward from the German ocean, from which it is separated by a long narrow sandbank. It is 35 miles long, and no where more than 8 broad. It is deep and secure, but there are sandbanks near the entrance. It affords plenty of good fish, particularly oysters.

Sley is a shallow Bay about 30 miles long, with the width of a river.

Mountains.] In the kingdom of Denmark proper there are no heights, which can aspire to the name of mountains.

Forests.] There are some woods in the Danish isles, and forests in Jutland. The western part of Jutland has not wood enough for fuel. The eastern is well supplied.

Botany.] The botany of Denmark proper does not materially differ from that of the other northern provinces of the German empire, which will be hereafter noticed more minutely when describing the states of the Germanic body.

Zoology.] The Danish horses are much esteemed both for their speed and their strength. They are sought after in France, Russia, Germany and Sweden, for light and heavy cavalry and as coach-horses. The oysterbanks, which extend from Heligoland to the coast of Jutland are let to farmers by the crown.

Mineralogy.] Some fuller's earth, alum and vitriol found in Jutland, and some porcelain clay in the island of Barnholm, constitute the whole of the mineral productions of Denmark.

Mineral Waters.] In mineral waters the Danish dominion are very deficient; and those discovered in 1768 at Oersten in the Sondmoer appear to be little frequented.

DANISH ISLANDS.

THE prime seat of the Danish monarchy having ever been in the isles of Zealand, and Funen, they have been considered in the general description of the monarchy. The other principal islands in that group are Moen, Falster, Laaland, Langeland, Femeren and Als'en.

Moen, 16 miles long, and from 3 to 5 broad, is S. E. of Zealand, contains a single town called *Steege*, and belongs to the diocese of Zealand.

Falster is 60 miles in circumference, contains two towns, and is W. of Moen. A governor resides here, appointed by the crown. *Laaland*, W. of Falster, is 30 miles long and 12 broad. It is

thought the most fertile spot in the Danish dominions, and produces very great quantities of corn of every kind. The land is low, the soil damp, and the climate unhealthy. The eastern part of the island is well furnished with wood. Naskow is the capital. It has likewise its own governor. *Langeland*, 30 miles long, and from 3 to 5 broad, is very fertile. It belongs, with the two last mentioned islands, to the diocese of Funen.

Femeren, in the diocese of Holstein, is 30 miles in circumference. It contains the town of Burg, and several villages.

Alsen, in the diocese of Sleswic, is 18 miles long and 6 wide. It is fertile, well wooded, and well stocked with game.

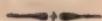
Bornholm, the most easterly of all the Danish islands, is 18 miles long and 10 broad. Though surrounded by rocks and the soil stony, it is fertile, abounding with excellent pastures; oats, butter and fish constitute the wealth of the inhabitants. It contains mines of coal and quarries of marble. It is 75 miles from Zealand, and 15 from Schonen. Lat. 55° 12'. Long. 15° 20', E. It was ceded to Sweden in 1658; but the inhabitants revolted the same year, and restored the isle to Denmark.

Off the west coast of Jutland are the isles of Nordstrand, Fora, Sylt, Rom, Fanoe, and others, which with Heligoland were known to the Romans; and the writers of that nation appear often to have confounded them with some of the Orkneys, and even with the islands in the Baltic.

For many years the Norwegians held the isles of Orkney and Shetland, which last was styled by them the Land of Hialt, from an adventurer so called, whence the corrupt names of Zetland, Yelland, and Shetland.

The *Ferro*, *Faro* or *Faroes* islands are 22 in number, lying between lat. 61° 15' and 62° 21' N. and extending 67 miles from N. to S. and 45 from E. to W. They consist of a group of steep rocks or hills lying so close to each other, that their bases are merely separated by a brook. Towards the sea they generally terminate in perpendicular rocks from 1200 to 1800 feet in height. Those declining more gradually have two or three sloping terraces, formed by projecting rocks, and covered with grass. Those parts which are arable have nowhere more than 4 feet depth of soil, lying upon a rocky bottom, often not more than 8 inches; and often the sides are so steep that no earth can remain on them. Strata of basaltick columns are found among the hills. In *Suderoe* these are of considerable height and resemble those of Staffa, reaching into the sea. Deep fissures of considerable length are met with among the hills. Caverns also are frequent in the shores, the favourite haunts of seals; some so deep that a boat may enter a hundred fathoms; some pass through a hill, and are open at both ends; some stretch through a whole island. There are several lakes on the hills, the largest 2 miles in circumference. Torrents are numerous, and afford great facilities for watermills. The highest, called *Fosaa* in Nordotromse, consists of two descents each of 100 feet. Seventeen of these islands are inhabited. They were first peopled in the 9th century by some Norwegian pirates who

were reduced to obedience by Magnus the Good. A small colony of Fins afterwards occupied the more southern islands. The population in 1801 was 5,265, and the revenue, in 1790, 639^l 8s sterling. The inhabitants enjoy peculiar freedom. They live principally by fishing. The islands compose 7 parishes, divided into 39 congregations with each its church. There is a clergyman in each parish. The largest income is 25^l sterling. At one island it is necessary to hoist the clergyman by a rope from his boat, there being no other landing. There is no schoolmaster in the islands, parents instructing their own children. All of them can read, except a few persons of great age. They are remarkably well instructed in the Christian religion, and often thoroughly acquainted with the Bible. The men dress plainly; the women are fond of ornaments. They are remarkably kind and upright in cases of shipwreck.—The gout, catarrhal fevers, the stone, and scrofula are the common diseases. The leprosy is disappearing. The most violent hurricanes are prevalent. They frequently unroof houses, and even tear the turf from the sides of hills. The falcon, crow, martin, starling and wren, and most kinds of sea-fowl, are common.—Rats are so numerous as frequently to destroy a cornfield in two nights. There are no amphibious animals of any kind.



SWEDEN.

CHAPTER I.

HISTORICAL GEOGRAPHY.

**NAMES, EXTENT, BOUNDARIES, DIVISIONS, ORIGINAL POPULATION,
PROGRESSIVE GEOGRAPHY, ANTIQUITIES, RELIGION, GOVERN-
MENT, POPULATION, COLONIES, ARMY, NAVY, REVENUE, MAN-
NERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, UNI-
VERSITIES, CITIES, EDIFICES, ROADS, INLAND NAVIGATION,
MANUFACTURES, AND COMMERCE.**

Names.] SWEDEN, in the native language *Suitheod*, and more modernly *Sweireke*, appears to be a very ancient appellation, and is said, by the northern antiquaries, to imply a country whose woods had been burnt or destroyed. The name seems as ancient as the time of Tacitus,* who, after describing the Suiones who lived in islands of the ocean, passes to the Sitones, and afterwards to the nations at the farther end of the Baltic. The Sitones must have dwelled in the southern provinces of Sweden; and the name either have been derived from Sictuna, the old name of the chief town, as appears from Adam of Bremen, or from *Suitheod*, the native term, softened as usual by the Roman enunciation.

Extent.] The kingdom of Sweden, from the most southern

* German c. 44, 45

promontory of Scone, in lat. 55° 20', N. to the northern extremity of Swedish Lapland, in lat. 69° 30', N. is 1000 miles in length. Its western extremity, the promontory of Hodal, is in long. 11° E. and its eastern limit, before the late dismemberment of Finland, was in long. 32° 30', E. In Lapmark it now reaches to about long. 29°, E. Its greatest breadth, in lat. 62° 30', N. was then 630 miles.—The average breadth at present is about 220. The number of square miles in Sweden, including Finland, is, according to Pinkerton, 208,912; according to Hassel 288,160; from which last, deducting those of Finland, there will remain for Sweden 188,433 square miles.

Boundaries.] Sweden is bounded N. by Norway*; E. partly by Russia, principally by the Baltic; S. by the Baltic; W. by the Cattegat, Norway, and, for a small distance, by the Atlantic. The little Swedish province of Herndal lies W. of the Kolen chain, and reaches thence to the Atlantic; extending from 65° N. as far as we can learn, about 30 or 40 miles on the coast, and completely dividing Northern, from Southern, Norway.

Divisions.] Sweden is divided into four great districts, or governments, which are subdivided into provinces as follows.

1. GOTHLAND.

Provinces.

Skone,	Smoland,
Brekinge,	West Gothland,
Halland,	East Gothland.

2. SWEDEN PROPER.

Provinces.

Wormeland,	Upland,
Nerike,	Westmanland,
Sudermanland,	Dalecarlia.
Stockholmland,	

3. NORLAND.

Provinces.

Jemtland,	Halsingland,
Angermanland,	Gastrikland,
Medelpad,	Herjeadelen.

4. LAPLAND.

Provinces.

Asele,	West Bothnia,
Umea,	Lulea,
Herndal,	Tornea,
Pitea.	Kemi.

Gothland, the southern province, belonged to Denmark till 1654; and with the other provinces, reaches from the Baltic to Norway. Swedish Lapland reaches from Norland N. and E. to Russian Lapland. That part of it which lies upon the coast is called West Bothnia. Sweden possesses the island of St. Bartholomew in the W. Indies. It lately possessed *Finland*, or the country between the river Kemi, and the Gulf of Finland, divided into

* Norwegian Lapland extends eastward to Russia, and entirely separates Swedish Lapland from the Arctic Ocean.

Karelen, Favastland, Nyland, Abo, Bjorneberg, and Kymmengard, in all 99,627 square miles.* Finland now belongs to Russia. Swedish Pomerania, also, a small territory on the coast of Upper Saxony, containing 1440 square miles, and 103,345 inhabitants was lately taken from Sweden by the French.

Original Population.] As there is no evidence that the Celts ever penetrated to Scandinavia, the first population appears to have consisted of Fins, who, perhaps seven or eight centuries before the Christian era, were supplanted by the Goths, mythologically represented as having been conducted by Odin, the god of war. No foreign conquest having since extended hither, the population continues purely Gothic in the southern parts ; while in the north there are the Laplanders, a native diminutive race resembling the Samoieds of the north of Asia, and the Esquimaux and Greenlanders, Arctic races of America.

Progressive Geography.] The southern parts alone of Scandinavia being known to the ancients, its progressive geography is rather obscure. The only people there situated known to Tacitus, were the Sitones. Ptolemy mentions five or six tribes, among which are the Gutæ of Gothland, as inhabiting the portion of Scandinavia known in his time. His four Scandicavian islands are evidently those of Zealand, Funen, Laland, and Falster. After this period there is little progress in Scandinavian geography till the time of Jornandes, in the sixth century, who describes Scanzia, or Scandinavia, at some length, and mentions various nations by whom it was inhabited. The next notices are due to the voyage of Ohter, recited by Alfred the Great ; and the more certain and general knowledge begins to dawn with Adam of Bremen, and the Icelandic historians.

Historical Epochs.] The following seem to constitute the chief historical epochs of Sweden :

1. The early population by the Fins and Laplanders.
2. The conquest by the Goths.
3. What little knowledge the ancients possessed concerning the south of Scandinavia.
4. The fabulous and traditional history, which begins about the year of Christ 520, and includes the conquest of Sweden by Ivar Vidfatme king of Denmark, about A. D. 760. Hence there is an obscure period till the reign of Biorn I. A. D. 829, commemorated, with his immediate successors, by Adam of Bremen.
5. The conquest of Denmark by Olaf II. about the year 900.
6. The partial conversion of Sweden to Christianity in the reign of Olaf III. A. D. 1000 ; but more than half a century elapsed before Paganism can be considered as finally abandoned, in the reign of Ingi the Pious, A. D. 1066.
7. The accession of the Folkungian branch, about the middle of the thirteenth century.
8. The Swedes, discontented with their king Albert of Mecklenburg, in 1388 elect as their sovereign Margaret heiress of

* Hassel.

Denmark and Norway. Thus ended the Folkungian race : and by the celebrated treaty of Colmar, A. D. 1397, the three kingdoms of the north were supposed to be united for ever. But after the death of Margaret in 1412, the Swedes began to struggle for their liberty ; and in 1449 Karl or Charles VIII. was elected king of Sweden.

9. The struggles between Denmark and Sweden, till the cruel and tyrannic reign of Christiern II. king of Denmark, Norway and Sweden.

10. Tyrants are the fathers of freedom. Gustaf Wase, whom we style Gustavus Vasa, delivers his country from the Danish yoke, after a contest which forms one of the most interesting portions of modern history. The revolt may be considered as having commenced when Gustaf appeared at Mora in Dalecarlia, A. D. 1520, and completed three years afterwards, when he entered Stockholm in triumph. Dissatisfied with the power of the clergy, which had repeatedly subjugated the kingdom to Denmark, this great prince, 1527, introduced the reformed religion, and died in his seventieth year, September 1560, after a glorious reign of thirty-seven years.

11. The reign of Gustaf Adolph, or Gustavus Adolphus, A. D. 1611—1631. Austria, Spain, and the other Catholic kingdoms, having conspired to extirpate the Protestant religion in Germany, this king was invited to assist the reformed, and carried his victorious arms to the Rhine and the Danube.

12. The reign of Charles XI. 1660—1697, when the arts and sciences began to flourish, and the power of the kingdom was carried to its utmost height. This reign of solid beneficence was followed by the calamitous sway of that madman Charles XII.

13. After the weak reign of Charles XII. Sweden sunk into political humiliation ; and is now regarded as little better than a province of France, to which disgrace the Swedish aristocracy as naturally tends as that of Poland.

Antiquities.] The ancient monuments of Sweden consist chiefly of judicial circles, and other erections of unhewn stone, followed by the monuments inscribed with Runic characters, some of which are as recent as the fifteenth century, and none of them can safely be dated more anciently than the eleventh. Not far from Upsal is the morasten, or stone on which the king used to be enthroned, as the old Scottish monarchs were at Scone. The ancient temples, called Skior, or Skur, were of wood, and have consequently perished. Some of the old castles, erected since the use of stone, are remarkable for their resemblance to what are called Pictish castles in Scotland.

CHAPTER II.

POLITICAL GEOGRAPHY.

RELIGION, ECCLESIASTIC GEOGRAPHY, GOVERNMENT, LAWS, POPULATION, COLONIES, ARMY, NAVY, REVENUE, POLITICAL IMPORTANCE AND RELATIONS.

Religion.] THE established religion is the Lutheran. There are 14 dioceses ; the Archbispopric of Upsala in Sweden Proper ; and the Bishoprics of Linkoping, Skara, Wexio, Lund, Gotheborg, and Calmar, in Gothland ; Straengnoes, Woesteras, and Carlstadt in Sweden Proper ; Wisbrey in the island of Gothland, and Hernosand, in Norland, under which diocese Lapland is included. There are two bishoprics also in Finland, Abo and Borg. The revenues of Upsala and Woesteras are about £ 1,000 sterling *per ann.* Those of the lowest bishoprics about £ 300. The subordinate clergy are *domprosts* or deans, *prosts* or archdeacons; *pastors* or rectors, and *commimisters* or perpetual curates. The parishes are estimated at 2,537 ; the curates at 1378 ; with 134 rectors, and 192 inspectors. Some of the parishes are very extensive.

Government.] The government of Sweden is a limited, hereditary, monarchy. The supreme power is in the Diet, which is composed of the King and the States. The King has the command of the army and navy, fills up all commissions, nominates to all civil offices, and appoints the judges of the various courts. He alone convenes and dissolves the States, has the disposal of the public money, declares war and makes peace. The power of making laws and of laying taxes, is vested in the Diet, and the King cannot do either without the consent of the States. The States are composed of four houses : 1. *The House of Nobles.* This consists of counts, barons, and untitled nobility, all originally ennobled by the crown. The head of each noble family in a direct line is entitled to a seat in the house. Of these there are, says Coxe, about 1200, though but a small part of these usually assemble. The younger sons have however a title, and the other privileges of nobility. 2. *The House of the Clergy.* This is composed of the 12 dignitaries, and a certain number of ecclesiastics, chosen by the Clergy of the respective districts. The number of members is seldom less than 50, or more than 80. 3. *The House of Citizens.* There are 104 towns in Sweden, each of which, if a staple town, may send two members, several of the largest three, and Stockholm ten. The number of members varies from 100 to 200. 4. *The House of Peasants.* The electors must own land, worth £ 30. None but those whose ancestors were peasants, can vote or be elected. Their number is usually about 200.

The Archbishop of Upsal is speaker of the House of Clergy.—The other houses choose their own speaker. The assent of three of the Houses and of the King is necessary to pass a law and to lay a tax. In 1800 the king was entrusted with the power of chang-

ing the nature and amount of the taxes imposed by the Diet. The King or either house may originate bills.

There were, before the late dismemberment, four superior courts of justice, called *Hof-raett*, one at Stockholm, for Sweden Proper, and the counties north ; one at Jonkioping for Gothland ; one at Abo for South Finland ; and one at Wasa for North Finland. There are the High Courts of Appeal in all capital cases, and in civil cases of great consequence. Every small town has one court of justice, and every large town two. The penal laws are mild. Whipping and confinement are the usual punishments. The *Harad's-raett*, or provincial criminal court, consists of the county judges, and a kind of jury of 12 peasants chosen by the inhabitants for life. Whenever they are unanimous they decide the cause though against the decision of the judges. As the monarch is not opulent, it is evident that so large and respectable a body might constitute a formidable barrier ; but the evils of faction have been so great and the Russian power and influence so destructive to the very existence of the state, that the deputies seem justly to regard the dictatorial power of the monarch, as necessary for their own preservation.

Population.] The number of inhabitants in Sweden, including Finland, was, in

1752,	2,215,639	1785,	2,821,669
1760,	2,383,113	1790,	2,864,512
1775,	2,640,177	1795,	3,045,617
1776,	2,671,949	1800,	3,182,139.
1780,	2,769,628		

The increase in 48 years was 966,500, or about two fifths of the whole. The increase in the last five years was less than 1 *per cent. per ann.* The number of males in 1776 was 1,284,989 and of females, 1,386,962. Of the population in 1800, 12,068 were of the order of the nobility ; 16,434 of the clergy ; 7,126 students ; 1,275 of the wholesale merchants ; 17,233 retailers ; 2,605 of the manufacturers ; 87,434 mechanics ; 19,653 of the seafaring men ; 188,734 of the army and navy ; and 356,581 of other descriptions.

The population of the various provinces in 1800 was as follows.

	Square miles.	Inhabitants.	Do. on a square mile.
Gothland,	41,931	1,454,462	34-7
Sweden Proper,	40,577	653,767	16-1
Norland & Lapland,	105,925	239,072	2-16
Finland,	99,627	834,838	8-38

Sweden, 288,160 3,182,139 11

As Finland now belongs to Russia, the population of Sweden, exclusive of that province, is 2,347,301, or about 12-5 to the square mile.

Colonies.] Sweden only possesses one small colony, that in the island of St. Bartholomew in the West Indies, which was ceded to them by the French in 1785.*

Army.] The Swedish army consists of national and regular troops to the number of 53,035, viz.

Cavalry,	12,000
Infantry,	34,171
Artillery,	3,230
Engineers,	800
Galley-soldiers,	2,706
Life Guards,	128

Of these 18,424 are regular troops. The army is under the immediate command of 3 Generals, 14 Lieutenant-Generals, 14 Major-Generals, 33 Adjutant-Generals, and 93 Colonels. The annual expense of the regular troops is about 800,000 rix-dollars. The national troops are quartered upon the peasants, and are fed, and clothed, and paid by them. In time of peace they are under arms three weeks in the year, and are constantly exercised on Sundays after divine service.

Navy.] The fleet in 1808 consisted of 58 sail, viz.

Ships of the line,	20
Frigates,	16
Brigs,	7
Smaller vessels,	15

These were under the direction of 1 High Admiral, 1 Admiral, 6 Vice-Admirals, and 11 Rear-Admirals.

Beside these the galley fleet consisted of 200 sail, in 5 squadrons. The whole fleet was manned by 1500 marines and 7200 seamen, with a reserve of 8000 for a time of war; and carried 2760 cannon.

Beside these, the galley fleet consisted of 200 sail in 5 squadrons, defended by 2,706 soldiers. This is called the fleet of the army, and is used in transporting them across the Baltic.

Revenue.] The revenue in 1809 is stated by Hassel at 6,000,000 Swedish rix-dollars, which at 5s. sterling, each, is £1,500,000 sterling. This arises chiefly from duties, royal demesnes, poll-tax, stamps, taxes on the mines and the lottery. The expense commonly exceeds the revenue. The debt in 1807 was 13,233,632 rix-dollars, of which 9,742,642 was foreign debt, and 3,490,990 domestic.

The foreign debt being chiefly incurred at Hamburg, the country is overwhelmed with the paper money of that city; and the scarcity of gold and silver, and even of copper currency, is incredible. The ducat, the only gold coin, is worth about nine shillings sterling; while the silver crown may be valued at four shillings and sixpence. The schelling, or shilling, is worth little more than one penny sterling; and the copper consists of half and quarter shillings, the ancient heavy pieces being now rarely visible.

CHAPTER III.

CIVIL GEOGRAPHY.

MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION,
UNIVERSITIES, CITIES, TOWNS, EDIFICES, ROADS, INLAND NAVIGATION,
MANUFACTURES AND COMMERCE.

Manners and Customs.] THE manners and customs of the superior classes in Sweden are so much tinged with those of the French, their allies, that no striking peculiarity can be observed, and even the peasantry have so much vivacity and address, that they have been styled the French of the north. The complexion, which in the northern latitudes is generally fair, is here much diversified, being in some provinces dark brown.—The men are commonly robust and well-formed, and the women slender and elegant. The natives of the western province of Dalecarlia retain many ancient customs, and have been distinguished for their courage and probity, since the time that Gustaf Wase issued from the mines of that country to break the yoke of Denmark. The Finlanders, on the east of the Bothnic gulph, are now little distinguishable from the Swedes; and any remarkable peculiarities of manners and customs must be sought in Swedish Lapland. Lapland however being very remote, less known, and more recently described; an account of this singular people is given under a separate article.

Language.] The language of Sweden is a dialect of the Gothic, being a sister of the Danish, Norwegian, and Icelandic. In the two grand divisions of the Gothic, consisting of the German and Scandinavian dialects, the latter is distinguished by greater brevity and force of expression. There are many words in the Swedish which are also in the English, and in the eleventh century the natives of the two countries easily understood each other.* In the south of Sweden, which contains the chief mass of population, some German and French words have been adopted; while the Dalecarlian on the N. W. is esteemed a peculiar dialect, perhaps only because it contains more of the ancient terms and idiom.

Literature.] In the antiquity of literature, Sweden cannot pretend to vie with Denmark, Norway, or Iceland: the most early native chronicle, or perhaps literary composition, being not more ancient than the fourteenth century. In return, while the Danes seem occupied with internal policy, and public regulation, the Swedes have, in modern times, borne the palm of genius in many departments of literature and philosophy.

But Swedish literature can hardly be said to have dawned till the middle of the seventeenth century, when the Queen Christina, finding the country immersed in ignorance, invited Grotius, Descartes, and other celebrated men, who, though they did not

* Cox.

reside long in the kingdom, yet sowed the seed of letters, which gradually began to prosper in the wise and beneficent reign of Charles XI. In the succeeding or last century the name of Linnaeus alone might distinguish the national literature ; and it is joined in natural history with those of Tilas, Wallerius, Quist, Cronstedt, Bergman, and others. In history, Dalin and Lagerbring have distinguished themselves by a precision and force, which the Danes seem to sacrifice to antiquarian discussions. Sweden also boasts of native poets and orators ; and the progress of the sciences is supported by the institution of numerous academies.

Education.] The Swedes, like the New-Englanders, the Scotch, and the inhabitants of Iceland, Ferro, and Geneva, are universally acquainted with reading and writing. A school is established in every parish for these purposes, and all the inhabitants send their children. A public school is maintained also in each large town, at the expense of the crown, in which boys commonly continue till the 11th or 12th year, when they are sent to the *Gymnasia*. Of these there are 12, and the boys are here taught Latin, Greek, and Hebrew, the doctrines of the Lutheran Church, and the rudiments of the sciences. The great body of the Swedish youths pass through these institutions. At the age of 16 they are usually sent to one of the universities. Of these, before the late dismemberment, there were 3 in Sweden ; that of Lund, in Gothland, that of Upsala, in Sweden Proper, and that of Abo, in Finland. That of Lund was established in 1688, has 15 professors and 300 students, a small botanical garden, and a library of 20,000 volumes. The Professors are ranged under 4 classes ; in Theology 3, in Jurisprudence 2, in Medicine 3, in Philosophy 7, and several instructors in the elegant accomplishments. The university of Upsala, founded in 1346, had upwards of 2000 students in 1730 ; but in 1800 only 500. There were 21 Professors, 6 in theology, 2 in law, 3 in medicine, and 10 in philosophy, beside 7 instructors in the elegant arts. Their salaries are from £70 to £200 sterling. They deliver weekly, each, four public, and four private lectures. The library is large and valuable ; the botanical garden small, but well selected. There are no college buildings for the accommodation of the students. The university of Abo was founded in 1640, and has 16 professors, 300 students, and a library containing 10,000 volumes.

Cities and Towns.] Stockholm, the capital of Sweden, stands in a singular situation between a creek, or inlet, of the Baltic sea, and the lake Mæler. It occupies seven small rocky islands, and the scenery is truly singular and romantic. “A variety of contrasted and enchanting views is formed by numberless rocks of granite, rising boldly from the surface of the water, partly bare and craggy, partly dotted with houses or feathered with wood.”* Somewhat resembling Venice, but with greater diversity of prospect, it requires no fortifications. Most of the houses are of stone

* Coxe, iv. 33. See also Marshall, ii. 330.

or brick, covered with white stucco; except in the suburbs, where several are of wood painted red, as usual in the country of Sweden. This city was founded by the earl Birger, regent of the kingdom, about the middle of the thirteenth century; and in the seventeenth century the royal residence was transferred hither from Upsal. The entrance to the harbor is through a narrow strait, of somewhat difficult access, especially as there are no tides: and for four months in the year is frozen. It is however deep, and capable of receiving a great number of vessels. The royal palace stands in a central and high situation: and there are a castle, an arsenal, and several academies. The manufactures are few, of glass, china, woollen, silk, linen, &c. The population of Stockholm in 1800 was 75,517, and the houses 4,137.* It is in lat. 59° 20' 31" N. and in long. 18° 9' 30" E.

Upsala stands in the middle of an open fertile plain, and is divided into two almost equal parts by the rivulet Sala. The streets are drawn at right angles; the houses are generally constructed of trunks, smoothed into planks, painted red; and the roofs are covered with turf. Each house has a court-yard and garden. This is the oldest town in the north, and was, till the 17th century, the metropolis, and the royal residence. The inhabitants in 1799 amounted to 4,403, and the houses to 580. It is 45 miles from Stockholm, in lat. 59° 51' 50" N. and long. 17° 42' 39" E.

Carlscrona is the chief road for the royal navy, and stands principally upon a small rocky island in the Baltic, connected with the main by a dyke and two wooden bridges. The town is spacious, the houses principally of wood, is strongly fortified, and difficult of access. Several noble docks have been formed out of the solid rock for repairing the ships of war, most of which are built at this place, and by English workmen. The population in 1795 was 13,800. The foundations of the town were laid by Charles XI, in 1680. Lat. 56° 11' N. Long. 15° 7' E.

Gothenburg, in lat. 57° 42' 4" N. and long. 12° 3' 22" E. stands a small distance from the Cattegat, at the confluence of the Gotha and the Moldal. It is built partly on high ridges of rocks, and partly on a marshy plain, which they inclose.—The lower part is built upon piles; the upper hangs on the declivities. It is 3 miles in circumference. The houses, 1100 in number, are principally of wood, painted red. Population 13,218. The harbor is between two chains of rocks, a quarter of a mile wide, and is fortified. It is the port of the East India Company, and carries on $\frac{2}{3}$ ths of the export commerce of the kingdom, and $\frac{1}{4}$ th of the import. Its herring fishery is very valuable, not less than 600,000 barrels being caught annually, during the 3 weeks that it lasts; of which 200,000 are salted, and about 27,000 barrels of train oil made of the remainder. The fortifications are weak. The harbor is safe and commodious.

Nordkioping is built on both sides of the Motala, the outlet of Lake Wetter, 22 miles from the Baltic, in lat. 58° 30' N. It is 10

* Hassel.

miles in circumference. The houses are small and scattered, and the population in 1795 was 8,629. Several valuable manufactoryes are established here. The river affords a valuable salmon fishery, and is navigable for small vessels to the town.

Fahlun is situated in the midst of rocks and hills, between the lakes of Run and Warpen. The houses, 1135 in number, are chiefly of wood, and two stories. The inhabitants in 1801 were 6,064 ; many of them are employed in the mines. Lat. 60° 35' 49" N.

Gefle, on the river Gefle, in lat. 60° 39' 45" N. and in long. 17° E. is the chief commercial town in the north of Sweden. Many of the houses are of brick, and many of stone, plastered white. The river has 10 feet water, as far as the town. The exports are chiefly iron, pitch, tar, and planks. Population in 1795, 5730.

Johnkioping, at the head of Lake Wetter, in Smoland, is the seat of the superior court for the kingdom of Gothland. The houses, 512 in number, are roofed with turf, the usual covering of the Swedish houses. The inhabitants in 1785, were 4,087.

The other towns are Linkoping, Carlstadt, Calmar, Lund, Christianstadt, and Wisberg, in the island of Gothland.

Edifices.] Even including the royal palaces, Sweden cannot boast of many splendid edifices. The roads are in general far superior to those of Denmark and Norway, which seem unaccountably neglected, good roads being the very stamina of national improvement.

Roads.] Great attention has been paid by the government to the roads of Sweden. Though not so broad, they are as good as the English turnpikes. The traveller, journeying many thousands of miles, and in every direction, will find scarce one that deserves the name of indifferent. The high roads are made with stone and gravel, yet no toll is exacted. Each landholder is obliged to keep a part in repair, proportioned to his property. The mode of travelling from Sweden to Finland in the winter, is in sledges on the ice. The traveller leaves the continent at Grislohaven, and, passing through Aland, and various other islands, lands at Abo, on the other side of the Gulf of Bothnia, a distance of 200 miles. This journey is often extremely hazardous.

Inland Navigation.] Of late a laudable attention has been paid to inland navigation ; and the chief effort has been to form a canal between Stockholm and Gothenburgh. In this canal, styled that of Trolhattan, conducted along the river Gotha, stupendous excavations have been made through the granitic rocks, in order to avoid cataracts ; one of which, of more than 60 feet, is called the Infernal Fall. Yet the plans have repeatedly failed, from the ignorance of the engineers ; and the first expense ought to have been to procure a superintendant of real skill. The intention was to conduct an inland route from the Meler Lake to that of Hielmer, and thence to that of Wener ; and by the river Gotha, an outlet of the latter, to the Skager Rack and German Sea. This grand design is already in some measure completed.

Manufactures and Commerce.] The Swedish manufactures are far from being numerous, consisting chiefly of those of iron and

steel ; with cloths, hats, watches, and sail cloth. The manufactures of copper and brass, and the construction of ships, also occupy many hands. In 1785, it was computed that 14,000 were employed in those of wool, silk, and cotton. Of native products exported, iron is the most considerable ; and it is said that the miners in the kingdom are about 25,600.

The commerce of Sweden rests chiefly on the export of their native products, iron, timber, pitch, tar, hemp, and copper. Herrings and train oil also form considerable articles. The chief import is corn of various kinds, particularly rye, Sweden rarely affording a sufficiency for her own consumption ; with hemp, tobacco, sugar, coffee, drugs, silk, wines, &c. Mr. Coxe has published a table of the Swedish commerce, whence it appears that the exports in 1781 amounted to 1,368,830*l.* 13*s.* 5*d.* and the imports to 1,008,392*l.* 12*s.* 4*1*/*2**d.* so that the balance in favor of Sweden was 360,437*l.* 19*s.* 6*1*/*2**d.* which added to the gain by freights in the Mediterranean, and the East Indies, made a clear balance of 471,549*l.* 18*s.* 4*d* *3*/*4*. The trade was then carried on chiefly with England, Russia, Holland, France, Denmark, Hamburg and Portugal. The number of ships that entered into the different ports, was 2141 Swedish, and 149 foreign, total 2290 ; of those cleared out, 2311 Swedish, and 174 foreign, total 2485.*

CHAPTER IV.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Climate and Seasons.] THE different parts of Sweden present considerable varieties of temperature, but even in the middle regions winter maintains a long and dreary sway. The gulph of Bothnia becomes one field of ice ; and travellers pass on it from Finland by the isles of Aland. In the most southern provinces, where the grand mass of the population is centered, the climate may be compared to that of Scotland, which lies under the same parallel ; but the western gales from the Atlantic, which deluge the Scottish Highlands with perpetual rain, and form the chief obstacle to improvement, are little felt. In the north the summer is hot, by the reflection of the numerous mountains, and the extreme length of the days ; for at Tornea, in Swedish Lapland, the sun is for some weeks visible at midnight ; and the winter in return presents many weeks of complete darkness. Yet these long nights are relieved, by the light of the moon, by the reflection of the snow, and by the Aurora Borealis, or northern lights, which dart their ruddy rays through the sky, with an almost constant fulgence.

* Coxe.

Face of the Country. Soil and Agriculture.] No country can be diversified in a more picturesque manner, with extensive lakes, large transparent rivers, winding streams, wild cataracts, gloomy forests, verdant vales, stupendous rocks, and cultivated fields. The soil is not the most propitious ; but agriculture is conducted with skill and industry, so as much to exceed that of Germany and Denmark.*

Rivers.] Sweden is intersected by numerous rivers, the largest of which are in the native language called Elbs, or Elfs. The most considerable flow from the lakes, without any great length of course ; such as the Gotha, the only outlet of the vast lake of Wener. Its length is 70 English miles, and its course W. of S. About 14 miles from the Cattegat, it divides and encompasses the island of Hisingen. Its navigation is much impeded by cataracts. Numerous rivers fall into Lake Wener. Of these the Clara is the largest. It rises in Lake Foemund, in Norway, a little S. of the Doffrafiall chain, and pursues a southeasterly course of about 280 miles, to Carlstadt, on the island of Tingwalla, which it encompasses.

The Motala, the outlet of Lake Wetter, pursues an easterly course of 65 miles, to the Baltic. Its estuary is the Bay of Brunic. It forms several small lakes in its progress, and passes through a country, level, fertile in corn and pasture, and thickly studded with country seats, villages, and churches.

The river Dahl, the most important in Sweden ; consisting of two conjunct streams, the eastern and western Dahl, which rise in the Norwegian Alps, give name to the province of Dalarn, or Dalecarlia, and, after a course of about 260 British miles, enter the Bothnic gulph, about 10 miles to the east of Geffle, presenting, not far from its mouth, a celebrated cataract, esteemed little inferior to that of the Rhine at Schaffhausen, the breadth of the river being near a quarter of a mile, and the perpendicular height of the fall between 30 and 40 feet.† The surrounding scenery also assists the effect, which is truly sublime.

Lakes.] Few countries can rival Sweden in the extent and number of lakes, which appear in almost every province. Of these the most important is the Wener, which is about 80 British miles in length, by about 50 in breadth, in great part surrounded with forests, and rocks of red granite. It receives 24 rivers, abounds with fish, and contains many romantic isles.

Next is the Wetter, a lake of equal length, but inferior in breadth, which seldom exceeds 12 miles. This lake being surrounded with mountains is particularly subject to storms in the stillest weather, whence arise many popular tales and superstitions : it contains two remarkable islands ; and on the shores are found agates, cornelians, and touch-stones, or pieces of fine basaltes. The Wetter is clear, though deep ; and while it receives about 40 small rivers, has no outlet except the Motala.

The lake Meler, at the conflux of which with the Baltic is

* Marshall, iii. 90.

† Winxall's Northern Tour, p. 158. Coxe, v. 9.

founded the city of Stockholm, is about 60 British miles in length by eighteen in breadth, and is sprinkled with picturesque isles.— To the S. W. is the lake of Hielmar, more remarkable for its proposed utility in the inland navigation, than for its extent.

Many other lakes are found in the north of Sweden, among which the most considerable is that of Stor, in the province of Jemtland.

Mountains.] Sweden may be in general regarded as a mountainous country; in which respect it is strongly contrasted with Denmark proper, or Jutland, and the isles. The chief mountains are in that elevated chain, which divides Sweden and Swedish Lapland from Norway; from which successive branches run in a S. E. direction. It would appear that the granitic ridge of the chain is in Norway; while the flanks, consisting as usual of limestone, pudding-stone, and freestone, verge into Sweden.— The centre of the chain seems, as in the Alps and Pyrenees, to present the chief elevations, whence the mountains decline in height towards Lapland. In the centre and south of Sweden the red granite becomes very common: but in Westrogothia the mountains are often of trap.

Farther illustrations of the grand chain of mountains, which divide Sweden from Norway, will be found in the description of the latter country.

Forests.] The forests of this kingdom are numerous, and without their aid the mines could not be wrought. Dalecarlia, in particular, abounds with them, and the numerous lakes are generally skirted with wood to the margin of the water.

Botany.] The lowlands and lakes of Scandinavia are principally situated in the south of Sweden, and the great ranges of Alpine mountains are found near the Arctic circle, or at least are confined to the northern provinces: hence it is that Lapland, both from its elevation and its northern site, contains several plants which are not to be met with in the rest of the peninsula.

Several species are common both to England and Scandinavia; and though the flora of Britain be the most copious of the two, yet the superiority is not perhaps so great as might be expected from the difference of climate. If those species that are natives of chalk hills and southern coasts of England are for the most part wanting to Scandinavia, yet this last contains several German and Arctic plants, which are not to be found in the first.

Of timber trees there are but few species; the most common, and those which constitute the wealth of Scandinavia, are the Norway pine, and the fir: of these there are immense forests, spread over the rocky mountains, and deeping with their sullen hue the whole horizon; thousands of giant growth are every winter overthrown by the storms, and allowed to perish where they fall from the impossibility of transporting them to the sea; others, in more accessible situations, are converted to various human uses; the wood from its lightness and straightness is excellent for masts and yards, and various domestick purposes; the juice, as tar, turpentine, and pitch, is almost of equal value with the wood; and the

inner bark, mixed with rye meal, furnishes a coarse bread in time of scarcity. The mountain ash, the alder, the birch, and dwarf birch, and several kinds of willow, are found in the whole peninsula ; the lime, the elm, the ash, and the oak, though growing with freedom in the southern parts, are incapable of withstanding the rigors of a Lapland winter. Among the larger shrubs the German tamarisk, and the barberry, are met with chiefly in the south ; the burnet rose, the gale, the raspberry, and juniper, are hardy enough to flourish even within the Arctic circle. The lower woods and thickets afford the *Linnæa borealis* in great abundance, with the mezereon, the hepatica, and the *cornus Suecia*. The firwoods yield two species of pyrola, and the shady sides of the mountains and alpine lakes are adorned by the *serratula alpina*, *tossilago frigida*, the wolfsbane aconite, globe flower, and the splendid *pedicularis sceptrum*.

The dry rough tracts on the sides of the mountains are covered with the heath, the bearberry, and the Iceland and rein deer lichen ; the one an article of food to the inhabitants, the other the chief support of the animal whose name it bears. The bleak summits where even the heath cannot root itself are clothed with the beautiful azalea procumbens, and other hardy plants.

Zoology.] The Swedish horses are commonly small but spirited ; and are preserved, by lying without litter, from some of the numerous diseases to which this noble animal is subject. The cattle and sheep do not seem to present any thing remarkable.—Among the wild animals may be named the bear, the lynx, the wolf, the beaver, the otter, the glutton, the flying squirrel, &c. Sweden also presents one or two singular kinds of falcons, and a great variety of game.

Mineralogy.] Of modern mineralogy Sweden may perhaps be pronounced the parent country ; and her authors, Wallerius, Cronstedt, and Bergman, have laid the first solid foundations of the science. It would therefore be a kind of literary ingratitude not to bestow due attention on Swedish mineralogy. First in dignity, though not in profit, are the gold mines of Adelfors in the province of Smoland. The gold is sometimes native, and sometimes combined with sulphur. Some ores of copper are also found in the same vein, which likewise presents galena and iron. But these mines seem to be nearly exhausted. In the production of silver Sweden yields greatly to Norway ; yet the mine of Sala, or Salberg, about 30 British miles west of Upsal, maintains some reputation. The silver is in limestone ; which, however, when it is large grained and free from mixture, contains no mineral, and is styled ignoble rock : it is on the contrary metalliferous when fine grained, and mingled with mica.* There are about 100 veins, greater or smaller. The silver is rarely found native, but is procured from the galena or lead ore. Silver has also been found in Swedish Lapland.

The chief copper mines of Sweden are in the province of Dale-

* Bergman, *Phy. Geog.* ut supra, p. 49.

carlia. On the east of the town of Fahlun is a great copper mine supposed to have been worked for near 1000 years.* The metal is not found in veins, but in large masses ; and the mouth of the mine presents an immense chasm, nearly three quarters of an English mile in circumference, the perpendicular depth being about 1020 feet. About 1200 miners are employed. Copper is also wrought in Jemtland ; and at Ryddarhytte is found iron. Nor is Sweden deficient in lead : but iron forms the principal product, and the mine of Danamora is particularly celebrated for the superiority of the metal, which in England is called Oregrund iron, because it is exported from Oregrund an adjacent port, where the Bothnic gulph joins the Baltic. The mines of Danamora have no galleries, but are worked in the open air by means of deep excavations†. The ore is in a limestone rock, and occupies about 300 persons in twelve pits. This valuable mine was discovered in 1488. Bergman describes the iron mine of Taberg in Smoland, as consisting of beds of ore, of a blackish brown, separated by beds of mould without any stone.‡ This enormous mineral pile is rivalled by an entire mountain of iron ore near Tornea, in Lapland ; and at Lulea the mountain of Gellivar forms a mass of rich iron ore, of a blackish blue, extending like an irregular vein for more than a mile, and in thickness from 300 to 400 fathom.§ Cobalt is found at Basna, and zinc at Danamora ; while the mines of Sala present native antimony ; and molybaena appears at Norberg. Coal has been recently discovered in the province of Scone.

Sweden abounds with beautiful granite ; but in marble yields to Norway. Porphyry also appears in the mountains of Swucku, and many other parts.

The most renowned mineral waters in Sweden are those of Medvi, in eastern Gothland.

Sweden and Swedish Lapland abound with natural curiosities of various descriptions. Some of the lakes and cataracts have been already mentioned ; and it would be in vain to attempt to describe the many singular and sublime scenes, which occur in so variegated and extensive a country.

SWEDISH ISLANDS.

SWEDEN possesses many islands, scattered in the Baltic sea and gulph of Bothnia. The long island of Oland, or Celand, is in length about seventy miles, in breadth about six. In the north are many fine forests and quarries of stone, while the southern part is more level and fertile, and yields plenty of butter, honey, wax and nuts. The horses are small but strong, and the forests abound with deer, nor is the wild boar unknown. Freestone, alum, and touchstone are products of Celand ; and the inhabitants are computed at near 8000. The sailors belonging to the crown

* Coxe, v. 94.

† Ibid. v. 103.

‡ Ut supra, p. 58.

§ In another passage, p. 23, Bergman observes that the two mountains of Kerunawara, and Lousowara, in Pitca Lapland, only divided by a little valley, are wholly composed of iron ore.

are generally quartered here. Next occurs the island of Gothland, known to the literary world by the travels of Linnæus, about seventy miles in length, and twenty-four in breadth; a fertile district remarkable for an excellent breed of sheep. There are fine woods of oak and pine, good pastures, profitable fisheries, and large quarries of stone on this island. Cornelians and agates are found here. Wisbury is the capital, the population of which is 3,745. It was subject to the Danes for near two centuries, till 1645, when it was restored to Sweden.

The isles of Aland lie in the entrance of the gulph of Bothnia, between lat. 59° 47', and 60° 30', N. and long. 19° 17', and 22° 71', E. They are 80 in number. The largest, Aland, is 40 miles long, and 16 broad, containing 462 square miles. These islands form seven parishes, each of which has a church, besides which there are 7 chapels. The Laplanders and Fins were the earliest settlers. The inhabitants now speak the Swedish language. Those of Aland alone, amounted, in 1792, to 11,260, of whom a sixth part were above 50. The revenue yielded to the crown amounts to 19,936 rix-dollars; and 298 sailors are here registered for the navy. The inhabitants are employed in agriculture and fishing.—The island of Hisingen, at the mouth of the Gotha, is 16 miles long, and 6 broad, containing 7 parishes.

RUSSIAN EMPIRE.

THIS mighty empire, the largest in ancient or modern history, reaches from the gulf of Bothnia, to the western coast of America; and from the Frozen Ocean to Turkey, Persia, and Independent and Chinese Tartary. On the Frozen Ocean, it extends from the mouth of the Enaza, in about long. 31° E. to East Cape, in long. 190°, E. or 170°, W. On the Pacific, it extends southward to the mouth of the Amour, in lat. 53° 20', N. On the Caspian Sea, its most southern limit, is Derbent, in lat. 42° 8', N. The Phasis bounds it on the eastern shore of the Black Sea, and the Neister on the western. The Russian arms have lately however penetrated to the Danube, and the mouth of that river may probably be the Russian boundary in the next treaty with Turkey. Polangen, in lat. 55° 50', is its southern limit on the Baltic. The countries which it comprehends, together with their population and extent, are stated by Hassel as follows.

RUSSIAN EMPIRE.

185

I. EUROPEAN RUSSIA.	EXTENT IN Square Versts.	Square Miles.	POPULATION IN 1793—6.		In 1793—6.	
			Cities.	Villages.	Cities.	Villages.
I. BALTIC PROVINCES.						
1. St. Petersburg.	172,839	110,617	2,020,539	2,177,400		
	41,193	26,363	655,669	664,200	10	5316
2. Finland,	37,927	24,273*	186,590	205,100	7	1894
3. Estonia,	23,558	15,077	217,672	214,700	5	
4. Livonia,	45,546	27,149	542,446	602,200	9	
5. Courland, including Semigallia,	24,615	15,754	418,162	464,200	10	900
II. GREAT RUSSIA,	1,947,872	1,246,638	12,597,663	13,821,000		
6. Moskwa,	23,024	15,375	1,125,972	1,216,900	15	5,406
7. Archangel, which likewise includes the islands	580,924	371,791	102,428	141,500	7	
			basse noblesse & savages.			
1. Nova Zemlaya,	195,725	125,264				
2. Kalgueva,						
3. Solowezkoi,						
4. Weygatz,						
8. Wologda,	323,050	206,752	589,850	654,800		
9. Olonetz, with the Ladoga Lake,	183,733	117,589	226,966	281,400	10	
			basse noblesse.			
10. Kostroma,	87,777	56,177	1,146,092	1,272,200		
11. Novgorod,	125,129	80,083	755,833	825,300	10	7932
12. Pskow,	50,733	32,469	629,217	698,500		
13. Smolensk,	48,951	31,329	953,735	1,058,700	12	
			basse noblesse.			
			basse nob. and clergy			

* By the late addition of Swedish Finland, Russian Finland has received an addition of 99,627 square miles, and 835,000 inhabitants; making its present extent 123,900 square miles, and its population 1,040,100.

RUSSIAN EMPIRE.

	EUROPEAN RUSSIA, CONTINUED.		POPULATION IN 1793—6. 1880.		In 1793—6. Cities. Villages.	
	EXTENT IN Square Miles.	Square Versks.	1793	1880.		
14. Tver,	55,001	35,201	906,910	773,300	12	7385
15. Nishni Novgorod,	46,659	29,862	992,292	1,105,500	11	
16. Vladimir,	44,504	28,482	960,446	1,066,100	13	4828
17. Tula,	26,951	17,249	748,045	866,900	12	3186
18. Kaluga,	19,178	12,274	845,373 beside noblesse.	946,500	12	3796
19. Jaroslaw,	32,968	21,099	752,199	835,000	12	9487
20. Kursk,	33,925	21,712	1,182,709 beside noblesse.	1,312,900	15	1669.
21. Voronesh,	69,640	44,570	679,596	769,700	13	
22. Orel,	343,090	219,578	6,916,396	7,743,900		
	41,092	26,299	934,949	1,037,800	12	2582
			beside noblesse.			
23. Riasan,	37,783	24,181	941,387	1,045,000	12	4640
24. Tambof,	61,470	39,341	1,023,088	1,135,700	12	1662
25. Slobode-Ukraine,	56,779	36,339	657,808	736,700	15	1177
26. Tschernigof,	57,506	36,804	1,013,600	1,125,100		
27. Pultawa,	41,135	26,326	1,350,726	1,499,300		
28. Kiow,	47,325	30,288	994,838	1,004,300		
			beside noblesse.			
29. Mohilew,	132,259	84,646	— 1,670,202	2,459,200		
30. Witebsk, or Polotsk,	46,830	29,971	835,583	786,400	12	
31. Minsk,	32,304	20,675	beside noblesse.	746,400	12	
	53,125	34,000	834,619	926,500	109	
V. RUSSIAN POLAND.	189,204	121,090	3,648,847	4,223,300		

RUSSIAN EMPIRE.

187

EUROPEAN RUSSIA, CONTINUED.

	EXTENT IN Square Versts.	EXTENT IN Square Miles.	POPULATION IN 1793—6.	POPULATION IN 1808.	In 1793—6. Cities. Villages.
32. Wilna and Slonimsk,	52,326	33,488		940,000	
33. Grodno,	25,926	16,593	1,391,265 beside nobles.	594,000	
34. Volhynia,	67,400	43,136	1,076,427	1,194,900	57
35. Podolia and Bratzlaw,	33,585	21,494	1,181,155	1,311,100	
Binlystock,	9,967	6,379		183,300	52
	350,184	224,118	1,419,055	1,704,400	
36. Jekaterinoslaw,	68,499	43,839	944,093 beside savages.	1,049,000	
37. Cherson,	58,340	37,338			
38. Taurida, with the country of the Euxine {	79,570	50,925	157,133 beside savages.	301,400	
Cossacks,	143,775	92,016	318,829	354,000	
Donskoi Cossacks,					
Total,	3,135,448	2,006,687	28,272,692	32,129,200	

II. ASIATIC RUSSIA.

I. KASAN,	522,709	353,734	4,318,948	4,850,900
39. Kasan,	50,699	32,447	834,664 beside savages.	1,011,500
40. Pensa,	37,745	24,157	700,405 beside savages.	787,500
41. Simbirsk,	68,045	43,549	807,550 beside nob. and savages.	904,400
42. Wiatka,	107,832	69,013	930,787 beside savages.	1,048,200
43. Permia,	288,388	184,568	1,045,542 beside savages.	1,099,300

RUSSIAN EMPIRE.

ASIATIC RUSSIA, CONTINUED.	POPULATION IN 1793—6.			In 1793—6. Cities. Villages.
	Square Versts.	Square Miles.	1793—6.	
II. ASTRACHAN,				
44. Astrachan,	2,355,085	1,507,254	1,536,370	2,913,400
45. Caucasus, and under it	294,700	188,608	119,153 beside savages.	532,300
1. Georgia,	42,159	26,982		200,000
2. Derbent,	290	185		10,000
46. Saratow,	208,319	133,324	897,895	996,700
47. Orenburg,	273,037	174,744	519,322 beside nob. and savages.	874,400
Steppe of the Kirghis Cossacks,				300,000
III. SIBERIA.				
48. Tomsk,	10,294,487	6,588,472	1,038,359	1,510,700
49. Tobolsk,	4,143,829	2,652,051	622,422 beside savages.	841,000
50. Irkutsk; and under it	6,137,115	3,927,754	415,937 beside savages.	661,900
1. Behring's I.	3	6,482	4,148	8000
2. Copper I.		7,061	4,519	
3. Kurile Isles,				
TOTAL,	13,172,281	8,449,460	6,893,677	9,274,000
III. AMERICAN RUSSIA.				
1. Aleutian Isles,	16,835	10,774		
2. N. W. Coast.				
3. Spitzbergen.				
GRAND TOTAL,	16,307,729	10,456,147	35,166,369	41,404,000
				1650 160,000

The data for the population of 1808 are these. Tables of the marriages, births, and deaths are kept throughout the empire.—The excess of the births over deaths for 12 years ending with the year 1808, was 4,202,728. The other addenda, in the following table, are the conjectures of the best Russian Statistical writers, as quoted by Hassel; and are probably near the truth.

Census of 1793—6,	35,166,369
Overplus of 12 years,	4,202,728*
Georgia,	210,000
Kirghis-Cossacks,	300,000
Rialystok,	183,300
Savages,	1,000,000
Ungez Klassen,	340,800
	41,403,197

Or in round numbers, 41,404,000. To these should be added the population of Russian America.

RUSSIA IN EUROPE.

CHAPTER I.

HISTORICAL GEOGRAPHY.

EXTENT, BOUNDARIES, NAMES, ORIGINAL POPULATION, NATIONS, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, ANTIQUITIES.

Extent.] THE length of Russian Europe, from the southern extremity of the Crimea, in lat. 44° 35', to the northern extremity of Russian Lapland, in 70° N, is 1470 miles. Its breadth in the north, from the gulf of Bothnia to the Uralian mountains, is about 38 degrees of longitude, or 1200 miles. Farther south the country is narrower. The area is estimated by Pinkerton at 1,200,000, or with the late addition of Finland at 1,300,000. This estimate is we believe more accurate than that of Hassel, who calculates it at 2,006,687. Probably however the truth is between them.

Boundaries.] Russia in Europe is bounded N. by the Frozen Ocean; E. by Russian Asia; † S. by the Black Sea and Turkey; W. by Austrian and Prussian Poland, the Baltic, Sweden, and Norway.

* This table for 1804 was marriages 311,798; births 1,358,287; deaths 789,818, excess of births 568,469.

† The boundary which nature points out between European and Asiatic Russia, is the Sea of Azof; the Don, as far N. as Donskaiia; a line across to the Wolga; the Wolga; the Kama to its rise in the Uralian mountains; and the principal chain of those mountains to the Frozen Ocean. But this line, from Donskaiia to the source of the Kama, falls far east of that adopted by the Russian Government in the distribution of its provinces.

Numes.] This country, a part of the ancient *Sarmatia* or *Scythia*, was little known to the Romans. The first mention of the *Russi*, *Ruotzi*, or *Russes*, is in the Bertinian annals, in the year 839. They were, according to Tooke, a North-Gothic or Scandinavian tribe ; and occupied at that time Rotala, in Revel, old Ladoga, in St. Petersburg, Alaborg, in Olonetz, and Kholmogor, in Archangel.*

Original Population.] The Aborigines of Russia were principally the **FINNS**, and the **SLAVONIANS**. The former possessed the regions of the Volga and the Dwina ; the latter dwelt about the Dneiper and the Don. A colony of them penetrated farther north, and built Novgorod. The Russi, or Russes, about this time had established themselves in the places above specified. Soon after the Normanni (that is the Scandinavians, or as the Russians call them, Varagians) from the Baltic, drove the Russes into what is now Finland, and brought into subjection five tribes of the Finns and Slavonians. These tribes soon revolted, drove out the Normanni, and established a federative democratic republic. This was followed soon by intestine divisions ; and the five tribes came to the resolution of recalling the Russi, and of resigning to them the sovereignty. Rurik, the first prince, came with the Russi from Finland, to the mouth of the Volkhof, in 862. The tribes under his dominion were the *Russi*, who were Scandinavians ; the *Slavi* and *Krivilches*, who were Slavonians ; and the *Tschudes*, *Vessenians*, and *Meraenes*, who were Finns ; extending over the governments of Finland, St. Petersburg, Esthonia, Livonia, Pskow, Novogorod, Smolensk, Olonetz, Archangel, Vlordimis, Joroslaw, Kostroma, and Vologda. This was the principality of Great Russia or Novogorod. Soon after Oskold, the step son of Rurik, was invited, by the Slavonians of the Dniéper, to drive out the Chazares, a tribe from the Euxine, and to become their Prince. This was the foundation of a second principality, which was called Little Russia. The seat of it was Kiow. A considerable time afterwards a new principality arose in White Russia, in consequence of the quarrels between the other two. Its capital, at first, was Vladimir ; and, after 1328, it was transferred to Moscow. In 1240, the Mongol Tartars, under Batu, a descendant of Ghen-gis Khan, conquered the principality of Little Russia, and compelled the grand prince of White Russia to do him homage. Many Tartars were thus brought into the south eastern part of Russia. Little Russia, in 1320, was subdued by Gedimin, Grand Prince of Lithuania, together with Smolenck, Tver and Witebsk. In 1476, Ivan, Grand Prince of White Russia, subjugated the Tartar kingdom of Kazan, and in 1477, part of the principality of Great Russia. Ivan II. subdued Astrachan in 1554, and soon after the whole of Caucasus. He also began the conquest of Siberia. Alexey reduced Kiow and the Ukraine, in 1655 ; and Peter the Great, in 1721, acquired the remainder of Great Russia and the Baltic provinces, and several provinces from Persia, on the west of the Caspian. Catharine, in 1783, gained the Crimea, and in

* Tooke, I. 312.

1791 the country between the Bog and the Neister, from the Turks. In 1793, she reduced Little Poland and Lithuania; and, in 1796, the rest of the Russian Polish provinces. At the Peace of Tilsit, in 1807, Russia wrested from Prussia a great part of New East Prussia, and formed it into a province, called Byalistock, containing 6379 square miles, and 183,300 inhabitants; and in 1810, she added Swedish Finland to her empire, as before mentioned.*

Nations.] The SLAVONIANS are at present the majority of the Russian Population. They compose five distinct classes of inhabitants. 1, The *Russian Slavi* occupy most of the provinces of Great Russia. 2, The *Polish slavi* constitute the chief population of Witebsk, Mohilef, Minsk, Podolia, Volhynia, Wilna, and Byalistock; and are found in small numbers in the circle of Selinginsk on the Irtish. 3, The *Servians*, a colony from the eastern coast of the Adriatic, to whom in 1754, a considerable district was allotted in New Russia, on the Dniéper. They are now the population of the province of Ekaterinoslaw. 4, The *Lithuanians* are found in Witebsk, Mohilef, Minsk, Wilna, and Grodno. They are every where intermingled with the Poles. 5, The *Lettes* occupy four of the nine circles of Livonia, the whole of Courland and Semigallia, and the Bishopric of Pilten. The Livonian Lettes at the last census were 226,000 in number.

The *Cossacks* ought here to be described, a Tartarian title signifying *armed warriors*. They are of Slavonian origin, and are divided into two great branches, the *Malo-Russian*, or Cossacks of Little Russia, and the *Donskoi*, or Cossacks of the Don. The former are mentioned as a distinct people in the 14th century. Kiow was captured by Gedimin, prince of Lithuania, in 1320. A multitude of fugitives from Little Russia assembled in the lower regions of the Nieper, and formed a petty state with a military form of government. Increasing by degrees, they spread themselves over the neighboring country, and about the year 1420 occupied the regions between the Nieper and the Niester. Their freedom, their petty wars with the Turks and Tartars, and their roving life, rendered them brave and formidable. In 1654 they submitted to Russia. They are now divided into nobility, militia, burghers, and boors. Their warriors are very numerous. Many of them serve in the light-horse. About the year 1500, a colony of them crossed over the Nieper and settled in the government of Karkof, Kursh, and Vorometz, in an uninhabited but fertile country. These are the *Slobodian Cossacks*, and are very numerous and powerful. A second colony, not many years after, went farther south and settled at the Cataracts, or *Porogi*, of the Nieper. These are the *Zaporogian Cossacks*, the most warlike and ferocious of all. In 1775, their warriors were about 40,000 in number. About that time, in consequence of a rebellion in which they had been engaged, the Russian troops attacked and disarmed them. Part of them remained and took to various trades. The rest withdrew to the Turks and Tartars, or roamed on the frontiers.

* Page 185, note.

tiers of the empire. These last, in 1792, had the island of Tai-man, near the mouth of the Don, and the country between the river Cuban and the Sea of Azof, assigned to them. They have a well-disciplined body of 15,000 warriors.

The Donskoi Cossacks are probably descendants of fugitives from Great Russia. They are however a *Russio-Tartarean* mixture, as is evident from their features and language. In 1570, they made Tscherkask their capital, about 50 miles from Azof. They inhabit the plains of the Don in the governments of Saratof and Caucasus, as far as the Sea of Azof. They are estimated at 200,000 in number, keep a corps of light infantry of 25,000 always ready for marching, and can at any time furnish 50,000 cavalry completely equipped. The *Wolgaic Cossacks* early separated from the original stock. One horde of them, the *Dubofskoi*, dwell in large villages on the Wolga, at the mouth of the Dubof-ska, in lat. 49. They can raise 3000 warriors. The other horde, the *Astracanskoi*, live on the west bank farther down the Wolga, between Astracan and Tzaritzin, and are equally numerous. The *Orenberg Cossacks* are a later colony. Their homestead is about the Samara, a branch of the Wolga, and on the Ural, nearly as far down as Uralsk. They can bring 20,000 men into the field. The *Uralian Cossacks*, an earlier colony, left the Donskoi stem in the 15th century, and settled on the Caspian, about the mouth of the Ural. They now occupy the west side of that river from Uralsk down,* and can bring 30,000 men into the field. Their capital, Uralsk, contains 3000 houses of white poplar wood, and 15,000 inhabitants. The *Siberian Cossacks* are a fourth colony from the settlement on the Don. In the 16th century considerable multitudes of the Donskoi roamed eastward to the Caspian, and, by their piracies on that sea and their robberies by land, provoked the anger of Ivan II. Terrified by the preparations made in 1577 to chastise them, they dispersed over the neighboring regions. A troop of 6000 or 7000, under Yermak, proceeded up the Kama, crossed the Ural mountains, penetrated to the Tobol, the Oby and the Irtish, and subjugated the Tartars, the Voguls, and the Ostiaks. In 1581 he made over his conquests to Ivan. His companions intermarried with the natives. The number of the Siberian Cossacks now far exceeds 100,000. The greater part carry on trades, and 14,000 do military duty.

The *Finns* compose 12 tribes under the government of Russia; and one, the Hungarians, under that of Austria. The Russian Finns are, 1. The *Laplanders*, consisting of not much above 1200 families, (see Lapland.) 2. The *Finns*, properly so called. By the reduction of Swedish Finland, they are now entirely under the Russian dominion, except a few in Norway. Their numbers are 1,040,100. 3. The *Esthes*, or *Esthonians*, in Estonia or Revel, are computed at 180,000. 4. The *Liefs*, or *Livonians*, in the remaining five districts of Livonia, amounted, by the last census, to 257,000. They are considered, by many, as the same people with the Estonians; and Estonia and Livonia have received the com-

* The Kirghises are on the east side of the Ural.

mon name of *Liefland*. 5. The *Permians*, anciently the only polished and commercial race of Finns, now have their home in Wiatka, and Permia, and the northern districts of the Oby. 6. The *Syriaenes* are found in Wolagda, Permia, and Tobolsk. 7. The *Vogules* inhabit both sides of the northern Ural, and roam between the Irtish and the Oby, the Kama and the Wolga. 8. The *Votiaks*, in Wiatka, speak a pure Finnish dialect, and are about 45,000 in number. 9. The *Tscheramisses* in Kazan, Simbirsk, and Wiatka, are estimated at 20,000. 10. The *Tschuvasches* reside in the governments of Tobolsk, Wiatka, Nishni-Novgorod, Kazan, and Simbirsk. Their language is the Finnish, with many Tartarian words intermixed; and they pay the tax for more than 200,000 heads, all the males being taxed. 11. The *Mordvines* dwell on the Oka and Volga, in Kazan, Nishni-Novgorod, Simbirsk, and Pensa. 12. The *Ostiaks* of the Oby, in Tobolsk, are said to be a colony of Permians, and are the most numerous of the Siberian nations. All these various nations of Finns, though widely dispersed, speak dialects of a common language; and have a general similarity of appearance and customs. *Yummala* was the supreme god of all the Finns, as *Perun* was of the Slavonians, and *Odin* of the Scandinavians.

It should also be mentioned here, that a mongrel horde has arisen, called the Tipteri, composed of the eastern Finns and the Tartars. They occupy the Uralian mountains in Urenburg, and are found to be fast increasing. In 1762, about 34,000 paid the impost.*

Beside these there are several bands of European and Asiatic nations, dispersed in various parts of the empire. The Germans are found in Estonia, Livonia, and Courland; and form the most considerable, though not the most numerous, part of the inhabitants. The nobility of these provinces are chiefly descended from the ancient Teutonic knights. Most of the townsmen also are Germans. They are numerous also in Petersburg and Moscow. A few Swedes are found in Wiborg and Estonia. There are Englishmen in most of the sea ports. Frenchmen are dispersed in considerable numbers over the empire. There are remains of a Genoese colony in the Crimea. Greeks are found in Tschernigoff, Ekaterinoslaw, the Crimea, and on the sea of Azof. In Ekaterinoslaw are also Albanians, Moldavians, Walachians, and Arnauts. Turks are found in Orenburg, and on the plain of Otchakof. In Astrachan, Orenburg, and Derbent, are Persians; and on the Kama is a colony of Persians and Arabs. The Armenians are numerous in some of the large towns, and in Caucasus and Ekaterinoslaw. In Astrakan are likewise settlements of Indians, partly from Hindostan, and partly from Moultan. Beside these there are scattered in large numbers over Russia, two nations of cosmopolites, the Jews and the Gypsies.

Progressive Geography.] To enter much into the progressive geography of the Russian empire, would be to write a history of its revolutions. Till the 16th century this empire continued al-

* Tooke, I. 297—564. For the more eastern nations see Russia in Asia.

most unknown to the rest of Europe, and its geography must be faintly traced in the Byzantine annals, particularly in the work of Constantine Porphyrogenitus, on the administration of the empire.

The geography of Russia, in the middle ages, becomes not a little embarrassed from its repeated sub-division into small monarchies, which remained in a state of vassalage to the Tartars, till the year 1462, when Russia emerged from this eclipse, and gradually acquired its present extent and consequence. In modern times, Russia has gradually extended her limits at the expense of the Turks; and the addition of an ample third of Poland, has afforded her a source still more stable and fertile of men and power.

Historical Epochs.] The following appear to be the chief historical epochs of this mighty empire :

1. The foundation of the kingdom by Ruric, a Scandinavian chief, A. D. 862. His descendants held the sceptre above 700 years.
2. The naval expeditions of the Russians against Constantinople, in the tenth century.
3. In the same century the baptism of Olga the queen, and the subsequent conversion of the Russians to Christianity.
4. The invasion of the Tartars under Batu Khan in 1236, and the subsequent vassalage of Russia.
5. The abolition of the power of the Tartars by Ivan III. who died in 1505.
6. The reign of Ivan IV. surnamed Basilowitz, known to western historians by the style of the tyrant John Basilides.
7. The death of the Czar Feodor in 1508, with whom expired the long progeny of Ruric. Several impostors afterwards appeared, under the name of Demetrius, the murdered brother of this sovereign.
8. The accession of the dynasty of Romanow, 1613, in the person of Michael Feodorowitz, sprung in the female line from Ivan IV. He was followed by his son Alexis, father of Peter the Great.
9. The reign of Peter I. has been justly considered as a most important epoch in Russian history; but on reading the annals of the preceding reigns from that of Ivan IV. it will be perceived that a part of our admiration for Peter arises from our inattention to his predecessors, and that the light which he diffused was far from being so sudden and grand as is commonly imagined.
10. The late reign of Catharine II. deserves to be commemorated among the most brilliant epochs in the Russian annals; nor must her personal crimes exclude her from the list of great and able sovereigns.

Antiquities.] Of ancient monuments, Russia cannot be supposed to afford great variety. Sometimes the tombs of their pagan ancestors are discovered, containing weapons and ornaments. The catacombs at Kiow were perhaps formed in the pagan period, though they be now replete with marks of Christianity. They are labyrinths of considerable extent, dug as would appear, through a mass of hardened clay, but they do not seem to contain the bodies of the monarchs.*

* Herbin. *Cryptæ Kijovienses.*

The conversion of the Russians must of course have been followed by the erection of many churches ; but as Byzantine, or Italian architects were employed, those edifices have but few peculiarities. Perhaps no country of considerable extent can afford fewer monuments of ancient art than Russia.

CHAPTER II.

POLITICAL AND CIVIL GEOGRAPHY.

RELIGION, GOVERNMENT, LAWS, POPULATION, COLONIES, ARMY, NAVY, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, UNIVERSITIES, CITIES AND TOWNS, INLAND NAVIGATION, MANUFACTURES AND COMMERCE..

Religion.] THE religion of Russia is that of the Greek church. Before the year 1588 the patriarch of Constantinople was the head of the Russian churches. In that year Job, the metropolitan of Moscow, was constituted patriarch. He had ten successors. The last, Adrian, died in 1699, and the office was formally abolished by Peter the Great, in 1721. Its powers and duties were transferred to a council, called the *Sacred Synod*, composed of the Emperor, who is president ; a vice-president, who is generally the metropolitan archbishop ; and a number of counsellors and assessors.

The clergy are divided into regular and secular. The regular clergy are the bishops ; the archimandrites, or abbots ; and the igoomens, or priors. There are 31 eparchies, or bishoprics, yielding each a salary of from £1000 to £1200 sterling, per ann. Several of the incumbents have the title of archbishop ; but this is not attached to the see, but a personal distinction, conferred by the sovereign. There are, in the whole empire, 480 monasteries, superintended by abbots and priors, and containing 7300 monks ; and 74 nunneries, superintended by abbesses, and containing 1300 nuns. The principal wealth of the church is centered in the monasteries. None of the regular clergy are permitted to marry. The secular clergy are the parish priests. They are called *papas*, or fathers. They are the refuse of the people, and are often unable to read. Their salaries are very small. They are obliged to marry before ordination, are not allowed to marry a second time, and on the death of their wives lose their parishes, unless the bishop orders otherwise. The number of parish churches, in the empire, is 18,350, beside several thousand chapels, and the numerous churches of the dissenters. The whole number of the clergy, regular and secular, is computed at 67,900, without including their families. They are all exempted from taxation.

Government.] The early sovereigns of Russia were called Great-Dukes. Ivan II. assumed the title of *Tzar*, or *Czar*, a Slavonian word signifying *King*, about 1550. Peter the Great was the first who claimed that of Emperor. The sovereign is despotic

in his authority, and arrogates to himself unlimited power. The throne is heritable by both sexes. The reigning monarch, however, may appoint any one of his own family as his successor. The emperor has a privy council, called the Directing Senate, subordinate to which are six colleges; the College of Foreign Affairs, the College of War, the Admiralty College, the College of Justice, the College of Commerce, and the Medical College. These, in their authority, extend over the whole empire. The governments into which Russia is divided, have each their governor general, executive councils, and courts of justice. The circles into which the governments are divided, have also their respective courts. The punishments of Russia were formerly extremely severe. But, during the reign of Catharine, every species of torture, as well as confiscation of property, was abolished. Capital punishments are extremely rare.

Laws.] Immediately on the fall of the Roman empire, we find the Gothic tribes sedulously collecting and publishing their peculiar codes of laws, but it would be difficult to discover any Slavonic code till the 16th century, when they emanated, not from the national council, but from the arbitrary will of the monarch. The first Russian code dates from the reign of Ivan IV. and the late empress had the merit of drawing up a new code with her own hands.

Population.] See Table.

Colonies.] Russia being a state new in maritime affairs, cannot boast of any colonies, nor can this name be applied to a small establishment or two in the eastern parts of Siberia.

Army.] The Russian army, in 1805, was composed of the following troops.

Staff and other officers,	14,979
Infantry, - - - - -	317,110
Cavalry, - - - - -	54,022
Artillery, - - - - -	44,052
Guards, - - - - -	13,103
Invalid corps, - - - - -	13,920
Irregular troops, - - - - -	100,934
	558,120
Kossacks, - - - - -	51,748
Tartars, - - - - -	48,652
Greek Volunteers, - - - - -	534
	100,934
Total,	659,054

The army was under the command of 5 field-marshals, 74 generals, 130 lieutenant-generals, 353 major and brigadier-generals. The irregular troops, Cossacks and Tartars, had also their own officers. Hassel also mentions, that since 1806, Russia has had a species of national guards, or militia, to the number of 612,000 men.

<i>Navy.]</i>	In 1805 the Russian navy consisted of	
	Ships of the line, - - - - -	32
	Frigates, - - - - -	18
	Smaller ships, - - - - -	59
	Galley fleet, - - - - -	226
		355

These carried 4428 guns, 33,507 sailors, 4000 gunners, and 8262 marines; and were commanded by 26 admirals, 13 commodores, and 61 captains. Of these ships there were stationed

1. In the Baltic, 20 ships of the line, 14 frigates, 6 cutters, and 19 sloops and brigs: in all, 2260 guns; and of the galley fleet, 20 gallies, 25 batteries, 81 gunboats, and 63 yawls; in all, 705 guns.
2. On the Black Sea, 12 ships of the line, 4 frigates, 7 brigantines, 18 sloops and brigs; 1125 guns; and 40 gunboats, carrying 132 guns.
3. On the Caspian, 6 sloops and brigs, carrying in all 70 guns.
4. On the sea of Ochotsk, 11 sloops and brigs, carrying 36 guns.

Revenue.] Hassel states the Russian revenue, in 1809, at 115,000,000 roubles. The rouble is equal to the Spanish milled dollar. This is raised, 1. From the crown peasants, lands and forests about 20,000,000. 2. From duties and monopolies 26,000,000. 3. From general excise 58,000,000. 4. From various other sources 11,000,000.

The expenditure of 1802 was,

For the Court, - - - - -	3,209,162
Civil List, - - - - -	8,763,548
Ministry of the Interior, - - -	9,930,773
Unterrichtsanstalten, - - - - -	2,149,213
Army, above, - - - - -	20,000,000
Navy, above, - - - - -	9,000,000

The Russian debt consists of 100,000,000 of roubles, in domestic debt, due for the paper issued by the crown; and a foreign debt, which, in 1786, amounted to 6,600,000 roubles.

Manners and Customs.] As the Russian empire comprises so many distinct races of men, the manners of course must be very various. The Laplanders are well known to be a diminutive race, who would be amiable from the pastoral simplicity of their manners, were not their persons ugly and dirty. The Finns are also rather short in stature, with flat faces, deep cheeks, dark grey eyes, a thin beard, tawny hair, and a sallow complexion; but the southern Finns, though they retain the national features, are of superior appearance. The Finns used to excel in fishing, and the chace; but they are now much blended with the Slavons, and have generally adopted their manners and customs.

The Slavonic Russians, who constitute the chief mass and soul of this empire, are generally middle sized and vigorous: the tallness and grace of the Polish Slavons seem to arise from superior climate and soil. The general physiognomy consists of a small mouth, thin lips, white teeth, small eyes, a low forehead, the nose commonly small, and turned upwards, beard very bushy, hair gen-

erally reddish.* The expression of the countenance is gravity, with good nature, or sagacity; the gait and gestures lively and impassioned. The Russian is extremely patient of hunger and thirst; and his cure for all diseases is the warm bath, or rather vapour bath, in which the heat is above 100° of Fahrenheit's thermometer. Dr. Guthrie has shewn that the Russians retain many manners and customs derived from their pagan ancestors, and has given some curious specimens of their songs and music, which seem to be very pleasing. He has also compared their dances with those of the Greeks; and finds in one of them a considerable resemblance of the wanton Ionic, while another resembles the Pyrrhic. He observes that the country girls dress in the *saraphan*, resembling the ancient *stola*, and bind up their hair with the *lenta*, a ribbon like the ancient *vitta*. They tinge their cheeks with the juice of the *echium Italicum*. When a marriage is proposed, the lover, accompanied by a friend, goes to the house of the bride, and says to her mother, "shew us your merchandize, we have got money," an expression which is thought to refer to the ancient custom of buying a wife. The Russians shew great attention to their nurses, and are so hospitable that they offer to every stranger the *Khleb da sol*, or bread and salt, the symbol of food, lodging, and protection. At a repast, some salt fish, or ham, and a glass of brandy, are presented in the first place; and, after dinner, cakes made with honey are usually served; the common drink is kvass, an acid, thin, malt liquor: the houses are ornamented with stoves, and among the rich, by flues conducted into every room, which is at the same time guarded with double windows. In several instances the Russians form a curious junction of European, and Asiatic manners; many of their ceremonies partake of Asiatic splendor: the great are fond of dwarfs; and some opulent ladies maintain female tellers of tales, whose occupation is to lull their mistresses asleep, by stories resembling those of the Arabian Nights.

Language.] The Slavonian is one of the primitive languages of Europe; and, in its various dialects, more extensively spoken than any of the others. It is the native tongue in Bohemia, Moravia, Croatia, Corinthia, Carniola, Sclavonia, Bosnia, Servia, Albania, Dalmatia, Poland, Lithuania, different parts of Hungary, and Bulgaria, and of Russia, both European and Asiatic. The Russian dialect of the Slavonian is extremely rich and harmonious. The alphabet is the Cyrilian, consisting of 36 letters,* and formed by Cyril, a monk of the 9th century. These letters are principally the Greek capitals, together with several others added by Cyril, to express sounds peculiar to the Slavonian. All the Slavonians in Europe and Asia, who profess the Greek religion, use these characters. The Roman letters have been adopted by the Slavonian catholics.

Literature.] When Ruric entered Russia, about 862, the whole nation was plunged in the grossest ignorance. Before the intro-

* Tooke, ii. 253.

* Tooke.—It originally consisted of 39 characters; but as now modified for common use, in 1707, was reduced to 30. (Coxe.)

duction of the Cyrilian, there were no written characters. The first introduction of literature must be ascribed to Vladimir the Great; who, on his conversion to Christianity in 988, instituted schools, and passed a decree regulating the education of youth. Yaroslafl his son ascended the throne in 1018, invited many learned priests from Constantinople, procured the translation of many Greek books into Russian, ordered poetical versions of the psalms and hymns for the churches, and established a seminary for 300 students at Novogorod. For the three next centuries the Tartar yoke subjected the nation, and its literature was confined to its monasteries.

The Chronicle of Nestor, a monk of Kiow, is a chronological series of the Russian annals from 858 to 1113. He died about 1115, and was the earliest and most interesting historian of the north. Sylvester continued the chronicle from 1115 to 1123; another monk carries the history to 1157, and another to 1203. The names of these last are not known. No nation in Europe can boast such a connected series of history during the same period. Many historians and annalists have written since. The Russian poetry, before the 18th century, consisted merely of a few songs and ballads. *Lomonozof*, the son of a fishmonger at Kolmogori, and born in 1711, raised it at once, by his translations and tragedies, but chiefly by his sacred and Pindaric odes, to high distinction and refinement. *Sumorokof*, the son of a nobleman, and born at Moscow in 1727, has gained, by his tragedies, his comedies, and his historical dramas, the title of the Russian Shakespeare. *Kheraskof*, still later, has made the conquest of Casan by Ivan the subject of an epic poem in 12 books, called the *Rossiada*, a work greatly admired by his countrymen. The Greek language is taught in a few schools. Latin is more common. Many of the classics have been translated, and several of the most approved, published in the original at Petersburg and Moscow.

Education.] A school was established at Petersburg by Catherine, for the instruction of 200 students, designed to be masters of the provincial schools. They are selected from the different seminaries of the empire, at 20 years of age, and continue at Petersburg 3 years. They are then sent to superintend the public schools in each government; two in each: one as a teacher of mathematics; the other of history, geography, and natural history. Here they instruct the preceptors for the smaller schools in the lesser towns. Catherine also established many seminaries for the instruction of those intended for holy orders.

Universities.] The university of Petersburg, founded by the late empress Catherine II. is a noble instance of munificence, and it is hoped will escape the fate of the colleges, founded at Moscow, by Peter the Great, which do not seem to have met with the deserved success. The number of the Russian universities we are not acquainted with.

Cities and Towns.] Moscow stands upon the Moskva, a branch of the Occa, a tributary of the Volga, in lat. 55° 45' 45" N. and lon. 37° 38' 30" E. It is 26 miles in circumference, and, according to the

Russian academy, contains 12,548 houses, and 300,000 inhabitants. The inhabitants are of many different nations. Russians, Poles, Germans, Cossacks, Tartars, Greeks, Turks, Chinese, English, French, Spaniards, and Italians, all wear the costume of their respective countries. Each nation also adopts its own stile of building. The eye here witnesses, besides the buildings of the Russians, log-houses from near the Frozen ocean; plastered palaces from Sweden and Denmark; painted walls from the Tyrol; mosques from Constantinople; Tartar temples from Bucharia; pagodas and pavillions from China; cabarets from Spain; dungeons, prisons, and public offices, from France; architectural ruins from Rome; terraces and trellises from Naples; and warehouses from Wapping. The suburbs are invested with a low rampart and ditch, and the five principal divisions of the town are separated by walls from each other. The Moskva river receives in its course through the city, the Yausa and the Neglina. It is navigable, except in the spring, only for rafts. Moscow contains, exclusive of chapels, 484 public churches, 199 of white-washed brick, and 285 of wood painted of a red colour. These churches have numerous bells, some immensely large; one of 128,000 lbs. weight; another of 288,000; and another still larger of 432,000. Moscow contains a university, a monastery, and a foundling hospital.

St. Petersburg, in lat. 59° 56' 23" N. and lon. 30° 25' 15" E. stands upon the Neva, the outlet of the Ladoga, close to the Gulf of Finland. The Neva forms several islands at its mouth, on the two largest of which about one third of the city is erected, and the other two thirds upon the southern side of the river. The population, in 1805, was 271,137.* The houses are generally of wood. Those of brick are white-washed. Cronstadt is the port of Petersburg, as the Neva is not navigable for large vessels. Peter the Great began the building of Petersburg in 1703. The exports, in 1797, amounted to 32,450,911 roubles; and the imports to 19,366,059. 1053 ships arrived in 1798.

Cronstadt, in lat. 59° 58' N. lon. 29° 53' 15" E. is built on the south-eastern extremity of the island of Retusari, in the Gulf of Finland, 10 miles from the northern shore, 4 from the southern, and 20 miles from Petersburg. The harbor is excellent and strongly fortified, and is the haven for the Russian navy in the Baltic. The population is 40,000.*

Kiow stands on the Dnieper, in lat. 50° 27' N. lon. 30° 32' 15" E. It was once the capital of Russia, and now contains 40,000 inhabitants.*

Riga was built in the year 1200. It stands on the Dwina, in lat. 56° 56' 32" N. lon. 24° 8' E. and is, except Petersburg, the most commercial town in the empire. Its population 30,109. The exports are corn, hemp, flax, iron, timber, masts, leather, tallow; the imports salt, cloth, silks, wines, groceries, pot-ash, and salted herrings. The Dwina is navigable for large vessels, and is here 2600 feet wide. In 1784, 1085 vessels entered, and 1077 cleared

* Hassel.

from this port. The exports were 6,392,422 roubles; the imports 1,422,717.

Wilna, on the Wilia, a branch of the Niemen; in lat. 44° 41' 2 N. lon. 25° 22' E.; was formerly the chief town in the Grand Duchy of Lithuania. It contains a university, and 20,900 inhabitants.*

Jaroslaw, in lat. 57° 37' 30" N. lon. 39° 15' 45" E. stands upon the Volga, and is celebrated for its manufactories of Russia leather. Population 20,000: Houses 2754.†

Tula, on the Upa, in lat. 54° 55' N. lon. 36° 36' 45" E. is celebrated for its manufactories of hardware, and furnishes about 1300 muskets weekly, and cutlery for the whole empire. Population 30,000.‡

The following are the names of the other large towns in European Russia, with their inhabitants, as given by Hassel.

Kaluga, 19,000, lat. 54° 30' N. Neshin, 16,000; lat. 51° 2' 45" N. Tver, 17,395; lat. 56° 50' N. Orel, 15,524; lat. 52° 36' 40" N. Odessa, 15,000; lat. 46° 29' 30" N. Kursk, 15,180; lat. 51° 43' 30" N. Cherion, 15,000; lat. 46° 58' 29" N. Mohilef, 12,500. Mittau, 12,350. Achtyrka, 12,788. Elizabeth-gorod, 12,000. Woronesh, 12,000. Revel, 11,800; lat. 59° 26' 29" N. Witebsk, 11,685. Charkow, 10,743. Bolchow, 10,740. Tambow, 10,686. Wologda, 10,529. Tscher-nigow, 10,000. Archangel, 7,200. Novogorod, 7,126.

Inland Navigation.] The inland navigation of Russia deserves more attention. Among other laudable improvements, Peter the Great formed the design of establishing an intercourse by water between Petersburg and Persia, by the Caspian sea, the Volga, the Mesta, and the lake Novgorod, &c. but this scheme failed by the ignorance of the engineers. During the long reign of the late empress many canals were accomplished, or at least received such improvements that the chief honor must be ascribed to her administration. The celebrated canal of Vishnei Voloshok was in some shape completed by Peter, so as to form a communication between Astracan and Petersburg, the course being chiefly afforded by rivers, and it was only necessary to unite the Twertzha running towards the Caspian, with the Shlina, which communicates with the Baltic. The navigation is performed according to the season of the year, in from a fortnight to a month, and it is supposed that near 4000 vessels pass annually.¶

The canal of Ladoga, so called, not because it enters that lake, but as winding along its margin, extends from the river Volkhof to the Neva, a space of 83 miles, and communicates with the former canal. By these two important canals constant intercourse is maintained between the northern and southern extremities of the empire. Another canal leads from Moscow to the river Don, forming a communication with the Euxine; and the canal of Cronstadt forms a fourth. Peter the Great also designed to have united the Don with the Volga, and thus have opened an intercourse between the Caspian, and Euxine seas, and the Baltic;

* Hassel.

† Hassel.

§ Dr. Clarke.

¶ Phillips, 20, 29

and the whole empire abounds so much with rivers that many advantageous canals remain to be opened.

Manufactures and Commerce.] Salt is perhaps the most important manufacture. It is procured from salt-mines, salt-lakes, and salt-springs. The richest salt-mines are about the Tlek, in the district of Ufa: on the Wolga, in the government of Caucasus; and on the Vilui, in Irkutsk. The first produces annually 8,140,000 pood. The salt lakes are the Elton in Saratof, yielding annually 5,700,000 pood; the salt lakes near Astrachan; those in Kolhyran; the Fauridan, yielding annually 3,000,000 pood; the Caucasian; and the Irkutskian. The richest salt springs are those of Solikamsk on the Kama, yielding annually 5,680,000 pood, and those of Starraya-Rura, on the Lovat. The vegetable oils are manufactured extensively. Train-oil is procured in great quantities on the Frozen Ocean, and on the Caspian. Ising-glass, a preparation from the air-bladder of the sturgeon, the beluga, and the sterlet, is made on all the larger rivers, and especially on the Caspian. The Wolga is the chief seat of the manufacture of *Kc-viar*, consisting of the salted roes of large fish. Soap, raw-tallow, and candles are exported in great quantities. Quas, a kind of malt liquor, is manufactured by all the boors. Coarse wines are made extensively from various kinds of fruits. Brandy is distilled from corns to the amount of 5 millions of *vedros*.* Aqua-fortis, and aqua regia, are prepared at Petersburg. Potash and salt-petre are extensively exported. The last is made principally in Little Russia. There are eleven private manufactories of iron and copper-vitriol, and several of *magnesia vitriolata*. Sugar is refined at Petersburg. There are more than 20 manufactories of dying colours and numerous dye-houses. The manufacture of medicines is extensive, there being about 60 establishments for this purpose. There are several large manufactures of tobacco; about 30 of paper; very large and numerous ones of paperhangings; and several of playing-cards. Printing is not very extensive. Sail-cloth and cordage are made in the greatest abundance. This is true also of linen, of which there are 64 manufactories. The best comes from Archangel. There are 8 cotton manufactories, some very considerable; and of silk not less than 40, in which silk is wrought up into almost every variety of manufacture. There are 5 of gold and silver lace, at Petersburg; and 56 of woollen cloths and stuffs, in the whole empire. Carpet manufactories are numerous, and those of hats much more so. Russia leather, morocco, shagreen, in Astracan, leather vessels and all the common kinds of leather, are manufactured in abundance. There are several large establishments for glass, earthen-ware and porcelain. Wax is produced in great quantities, but is generally exported unbleached. There are three public works for cutting the precious stones. Pitch and charcoal are made in large quantities by the boors. Powder-mills are numerous. Iron foundries and iron works are found every where, and the articles manufactured are hammers, cannon, anchors, nails, wire, needles,

* The *vedro* holds 5 gallons, or 40 pints.

coarse cutlery, fire-arms, and domestic utensils. Copper and brass works, and brass cannon foundaries are established in various places. Gold and silversmiths, jewellers and clockmakers are numerous in the large towns.

The Hanse-Towns established commercial factories in Novogorod and Pskow, in 1276. Riga, Reval, and Wiborg were in early times large commercial towns; and the former flourishing commerce of Taurida, is known to every reader of history. Archangel had been the chief commercial town of Russia some time before Petersburg was built, and is still a considerable port. All the commerce of the White Sea is carried on there, and the exports in 1793, consisting of Kaviar potash, tallow, wax, hides, hemp, &c. amounted to 2,525,208 roubles.

The commerce of the Baltic is more considerable, than that of all the rest of the empire. The exports amounted in 1793, to 33,604,589 roubles, consisting beside the articles already mentioned, of iron, flax, tobacco, cordage, lumber, soap, tar, hemp-oil, sail cloth, coarse linens, furs, salt-petre, corn, brandy, rhubarb, &c. The ports are Petersburg, Riga, Narva, Pernau, Cronstadt, Wiborg, Reval, Frederickshamn, Onega, and Arensburg. Petersburg alone, exported to the amount of 23,757,954 roubles, and Riga to the amount of 8,985,929.

The commerce of the Euxine is now fast increasing. The exports from all the ports in 1793, amounted to 1,198,395 roubles, and the imports to about 1,500,000. The articles imported are wines, fruits, coffee, and all Turkish commodities. The chief ports are Taganrok, Eupatoria, Oczacow, Cherson, Caffa, Kertsch, Yenicale, and Sebastopal. The whole exports on these three seas amounted, in 1793, to 37,328,192 roubles.

The Russian ports on the Caspian are Astracan; Gurief, at the mouth of the Ural; Kisliar, on the Terek; and Derbent. The exports are cloths, vitriol, soap, alum, sugar, leather, needles, linens, velvet, glass, paper, furs, hides, tea, corn, butter, wine, brandy, iron, copper, tin, lead, iron-ware, clocks, indigo, cochinchal, &c. The chief imports are raw silks, rice, dried fruits, spices, saffron, sulphur, naphtha, gold and gold dust, precious stones, and pearls from Khiva and Hindostan.

The foreign commerce by land is very considerable. Russia imports scythes, cloths, linens, hemp, flax, &c. from Poland and Prussia, to the amount of 2,000,000 roubles, and exports various articles to the amount of five hundred thousand roubles. The exports to Persia, through Kisliar and Mosdok, amount to one hundred thousand roubles, and the silks received by the same way, to 200,000. The Kirghises bring their horses, horned cattle, sheep and sheep-skins to Orenburg, Troitzk, Peterpaulosk, Yamisheva, Semipalat and Ustкаменогорск, to the amount of 1,500,000 roubles, and receive household and other European goods to the same amount. The Chinese commerce is likewise a mere barter, and is carried on at the town of Kiachta, on the Kiachta, a branch of the Bura, a tributary of the Selinga, in lon. 106° 32' E. and lat. 50° N. The town is separated by a vacant space,

140 yards wide, from Maimatschin, a Chinese town; the frontier of the two empires passing between them. The Russians export furs and peltry, woollens, velvets, coarse linens, leather, glass, looking-glasses, hard-ware, tin, talc, cattle, camels, horses, hunting dogs, provisions and meal, to the amount of 2,000,000 roubles. They receive in return from the Chinese, silk and cotton, raw and manufactured, teas, porcelain, japanned ware, fans, toys, tyger and panther skins, rubies, white lead, vermillion, and other colours, canes, tobacco, rice, sugar-candy, ginger, sweet-meats, rhubarb, and musk, to an equal amount.

The internal commerce is very great. The products of Siberia alone in iron, salt, gold, silver, furs, skins, copper, &c. carried annually to Russia, amounts to 12,000,000 roubles. That between the northern and southern provinces is also more important. The fairs held in various parts of the empire, greatly facilitate the intercourse of the provinces.

The annual products of the national industry was estimated by Tooke, in 1788, as follows :

	Roubles.
Grain,	144,000,000
Brandy,	15,000,000
Salt,	4,200,000
Mines,	8,750,000
Furs,	5,000,000
Hemp, flax, tobacco, linen, hemp-oil, linseed-oil, &c.	30,000,000
Forests,	20,000,000
Cattle and horticulture,	58,050,000
Fisheries,	15,000,000
<hr/>	
	300,000,000

The quantity of money in circulation at that time, was estimated thus,

	Roubles.
Gold and Silver coin,	76,000,000
Copper coin,	54,000,000
Paper money,	100,000,000
<hr/>	
	230,000,000

The annual increase of coin was then estimated at 5,000,000 roubles.

CHAPTER III.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES, RUSSIAN ISLES.

[*Climate and Seasons.*] THE climate of Russia in Europe, as may be expected in such a diversity of latitudes, presents almost

every variety from that of Lapland, to that of Italy : for the newly acquired province of Taurida may be compared with Italy in climate and soil. But winter maintains the chief sway at Petersburg, the capital, and the Neva is annually frozen from November to March or April. The climate around the frozen ocean, and the last European isle upon the N. E. that of Novaya Zemlia, or the New Land, is of noted severity, the northern side being encompassed with mountains of ice, and the sun not visible from the middle of October till February ; while it never sets during June and July. Taurida presents on the contrary, all the luxuriance of the southern year, while the middle regions are blest with the mild seasons of Germany and England.

Face of the Country.] In so wide an empire the face of the country must also be extremely various ; but the chief feature of European Russia consists in plains of a prodigious extent, rivalling in that respect the vast deserts of Asia and Africa. In the south are some extensive *steppes*, or dry and elevated plains, such as that above the sea of Azof, in length about 400 English miles.

The numerous and majestic rivers also constitute a distinguishing feature of this empire.

Soil and Agriculture.] The soil is of course also extremely diverse, from the chilling marshes which border the White and Frozen seas, to the rich and fertile plains on the Volga. The most fertile is that between the Don and the Volga, from Voronetz to Simbirsk, consisting of a black mould, strongly impregnated with salt-petre ; that is, a soil formed from successive layers of vegetable remains.* In Livonia and Estonia the medial returns of harvest are eight or ten fold ; and the latter is generally the produce of the rich plains near the Don, where the fields are never manured, but on the contrary are apt to swell the corn into too much luxuriance. Pasturage is so abundant that the meadows are little regarded, and the artificial production of grasses is scarcely known. Some of the meadows are watered, and produce large crops of hay, the dry pastures yield a short, but nutritious produce, and in a few of the steppes the grass will attain the height of a man, and is seldom mown. The exports of tallow and hides merely, amounted in 1793 to 6,862,000 roubles.

Agriculture is hardly known in the northern parts of the governments of Olonetz, and Archangel ; but in the central parts of the empire has been pursued from time immemorial.

In general however, agriculture is treated with great negligence, yet the harvests are abundant. In the north rye is most generally cultivated ; but in the middle and the southern regions wheat ; in the government of Ekatarinoslav the Arnautan wheat is beautiful, the flour yellowish, the return commonly fifteen fold ; nor is Turkish wheat, or maize, unknown in Taurida. Barley is a general produce, and is converted into meal, as well as oats, of which a kind of porridge is composed. Millet is also widely diffused. Rice succeeds well in the vicinity of Kislear. Hemp and flax form great objects of agriculture. Tobacco has been produc-

* Tooke i. 67.

ed since the year 1763, chiefly from Turkish and Persian seed. The olive has been tried in vain at Astracan, but prospers in the southern mountains of Taurida along the Euxine. The government of Moscow produces abundance of excellent asparagus ; and sugar-melons abound near the Don and the Volga. Large orchards are seen in the middle and southern parts of Russia, yet quantities of fruit are imported. While apples and pears are found as far north as the 49°, plums and cherries extend to the 55°. What is called the Kirefskoi apple often weighs four pounds, is of an agreeable flavour, and will keep a long time. A transparent sort from China is also cultivated, called the Nalivui, melting and full of juice.* Bees are not known in Siberia, but form an object of great attention in the Uralian forests.

Rivers.] The Wolga has already been described.

The Nieper or Dnieper, the ancient *Borysthenes*, rises in the forest of Volonskoi, in the government of Smolensk, near the sources of the Wolga and the Dwina. Its course is S. W. to Orsa, S. to Kiow, S. E. to the cataracts, and S. W. to the mouth ; on the whole W. of S. It is the largest river that runs wholly in European Russia, has a course of about 1200 miles, and is the scene of an extensive commerce. It has a number of islands ; a bed partly sandy and stony, and partly of marl ; and, though a calcareous, yet a salubrious water. From Smolensk to the Cataracts it is navigable in perfect safety, and as far as Kiow, its banks are forested. Below Kiow they are mostly bare and bordered with hills and mountains. The Cataracts are 13 in number. Empty barks pass over them safely, in very high water. The cargoes are carried by land more than 50 miles. The river below them, a distance of 300 miles, is perfectly navigable. Near its mouth it forms a marshy lake, called the Liman, about 50 miles long and 8 broad. The principal tributaries of the Nieper are the *Sosh*, the *Prypec*, the *Desna*, the *Soola*, the *Psiol*, the *Vorskla*, the *Sammara*, and the *Ingulats*.

The Don, the ancient *Tanais*, rises in the government of Rezan, from lake St. John, and pursues a course at first S. E. then S. W. and on the whole S. of about 800 miles, to the Bay of Taganrok, the N. E. part of the Sea of Azof. It has a very gentle current ; a water whitish and turbid, but not unwholesome ; a bed formed of sand, marl, and lime ; and here and there broad sand-banks and islands. It freezes in November, breaks up in February, and is of the utmost importance to the commerce of the neighboring country. The Voronetz, the Khoper, the Donetz, and the Manitsh are its chief tributary streams. Of these the Donetz is the largest, and is navigable. The Voronetz is connected by a canal with a small river emptying into the Okka, a branch of the Wolga.

The Bog, or Bogue, the ancient *Hypanis*, pursues a S. E. course, from its source in Podolia, to the Liman, or estuary of the Nieper, into which it empties at Oczakow. Its chief tributaries are the Ingul, the Sinucha, and the Guiroi, and its length is about 400 miles.

* Tooke iii. 340.

The Niester, the ancient *Tyras*, rises in Galicia, a part of Austrian Poland, near the head of the Vistula, and among the Carpathian mountains. It pursues a S. E. course, of about 600 miles, and falls into the Euxine at Akerman. The Podhont, which falls into it at Chotzim, is the boundary between Russia and Austria ; and the Niester below Chotzim separates Russia from Turkey.

The DWINA, or Duna, rises from a lake in the forest of Volkonskoi, in the government of Tver, near the sources of the Wolga and the Nieper, and runs S. W. and N. W. about 500 miles to the Gulf of Riga, where its breadth is 900 paces. It is every where navigable, though in several places obstructed by rapids, and is the scene of an extensive commerce. In the spring it is liable to sudden and dangerous inundations. Its waters are muddy, and its shores sandy and clayey.

The NEVA rises in Witebsk, runs northerly through Lake Ilmen into the S. E. extremity of the Ladoga ; and, passing by the southern shore of that lake, issues at its S. W. extremity, and runs W. 50 miles, to the head of the Gulf of Finland, into which it empties by several channels. Its length is about 450 miles. Before its entrance into the Ladoga it is called the Volkhof. The commerce on this river is of immense value to Petersburg.

The SVIR a navigable river connects the Lakes Onega and Ladoga.

The ONEGA falls into the head of the White Sea.

The NORTHERN DWINA flows through a swampy and woody region, and is navigable from Usting. Its western branch issues from Kubinskoi Lake ; its eastern rises in the government of Archangel. It falls into the bay of St. Nicholas, on the eastern side of the White Sea, at Archangel, after a course of about 500 miles.

The KULOI and the MEZEN, are also considerable rivers emptying into the White Sea, from the East, near its mouth.

The PETSHORA is a large river, rising in the western side of the Uralian range, and running northwesterly, 450 miles to the Frozen Ocean.

Here ought also to be mentioned the KAMMA and the OKKA. The Kamma is the largest tributary of the Wolga. It rises in Perme, from the Uralian chain, and pursues a S. W. course of 800 miles ; when it unites with that river about 50 miles below Casan and is scarcely inferior to it in size. The salt and iron of Siberia are very extensively transported on it. Its banks are generally forested with the oak and the fir.

The Okka, or Oka, rises in Orel, and runs N. E. to Nishni Novgorod, where it empties into the Wolga. It is navigable almost to its source and is one of the most important inland communications of the empire.

Lakes.] The Ladoga, Onega, and Enara have already been described.

The PEIPUS lies S. of the Gulf of Finland. It is about 60 miles long, and 45 wide. Through a short and broad strait it receives

the waters of the Pskow from the S., which is about 40 miles long, and 30 broad. The Welika falls into this latter lake, and is the only considerable stream flowing into the Peipus. It has two outlets. The Fellin runs W. through the Wertzerb to the Gulf of Riga. The Narova runs N. and empties into the Gulf of Finland at Narva.

The BIELO-OZERO, or White Lake through the Sheksna empties its waters into the Wolga. It is 40 miles long, and 24 broad. The bottom is a white clay, which, in stormy weather, occasions a thick white foam on the surface.

The ILMEN is about 32 miles long, and 24 broad. Close to its mouth stands the ancient city of Novogorod, on both sides of the Volkhof.

Mountains.—It has already been mentioned that European Russia is rather a plain country, though some parts of it be greatly elevated, such as that which sends forth the three rivers of Duna, Volga, and Nieper. This region which it passes in travelling from Petersburg to Moscow, is by some called the mountains of Valday, from the town and lake of Valday, situated on the ridge ; but by the natives it is styled *Vhisokay Plostchade*, or elevated ground ; and no mountains are here delineated in the common maps. In this quarter the ground is strewn with masses of granite, but the hills are chiefly marl, sand and clay ; and what are called the mountains of Valday seem to be a high table land, surmounted with large sand hills, and interspersed with masses of red and grey granite : near Valday is the highest part of the ridge, which seems to be in a N. E. and S. W. direction. The hills, lakes, and groves, are beautiful ; and there is an island with a noble monastery. To the south of Valday the masses of granite become smaller and more rare ; and calcareous petrifications appear, which are followed by the clay near Moscow. Mr. Tooke* computes the highest point of the Valday at only 200 fathoms above the level of Petersburg, about 1200 feet above the sea ; the height is inconsiderable, and gives a striking impression of the gentle and plain level through which such extensive rivers must pursue their course. The woods on the Valday are chiefly pine, fir, birch, linden, aspen, and alder : the soil in the vales is fertile, mostly clay and marl.

From the Valday towards the S. scarce a mountain occurs, but after passing the steppe of the Nieper, an arid plain with salt lakes which perhaps indicate the extent of the Euxine at remote periods, we arrive at the mountains of Taurida, which are rather romantic than of remarkable height, being calcareous and alluvial. To the S. of this chain, along the shores of the Euxine, are the beautiful vales, so well described by Pallas, productive of the laurel, the olive, the fig, and the pomegranate, while the arbutus adorns the steepest cliffs with its red bark, and foliage of perpetual green. The caper and the vine also abound in this natural orchard, and the flocks of sheep and goats feeding on the hills, or bounding from the rocks, unite with the simple and good humour-

* Vol. i. 130.

ed manners of the Tatar inhabitants, to render the scene truly pastoral.

The chain of Olonetz runs in a direction almost due N. for the space of 15° or about 900 German miles. The most arctic part is said to consist chiefly of granite, petrosilex, and limestone; and is not of great height, but retains perpetual snow from the altitude of the climate. More to the S. branches stretch on the E. towards the gulf of Kandalak; the granite is intermixed with large sheets of talc, and patches of trap are found, particularly near the gold mines of Voytz, on the western side of the river Vyg. Various other ores occur in this region, and veins of copper pyrites appear in the trap.

In the centre, between the mountains of Olonetz and those of Ural, there seems to be a considerable chain extending from the E. of Mezen to the Canin Nos, a bold promontory which rushes into the frozen ocean; but this chain appears to have escaped the searches of curiosity or avarice, by the perpetual snows with which it is enveloped. The Uralian chain has already been described.

Forests.] European Russia is so abundant in forests that it would be vain to attempt to enumerate them. There are prodigious forests between Pétersburg and Moscow, and others between Vladimir and Arzomas. Further to the S. there seems to have been a forest of still greater extent, probably the Riphæan forest of antiquity in the direction of the rich black soil so remarkable for its fertility.*

Botany.] When we consider the vast extent of territory comprehended under the European sovereignty of Russia, from the frozen shore of Archangel to the delicious climate of the Crimea, and that the whole of this great empire has scarcely produced a single naturalist of any eminence, all that is known of its vegetables, animals, and minerals, being collected for the most part within the last forty years by a few foreigners, under the munificent patronage of Catharine II, it will be evident that the rudiments alone of the Russian flora can as yet be extant. The provinces bordering upon the Baltic, and the newly acquired government of Taurida, have been examined with some attention; and a few striking features of the botany of the interior of the country have been described by travellers; but many years of patient research must elapse before the natural history of Russia is advanced to an equal degree of accuracy with that of the western parts of Europe.

The Russian provinces N. of the Baltic, contain the same plants as those of Swedish and Norwegian Lapland, which will be hereafter described. Such as extend between the 50th and 60th deg. lat. abound principally in the common vegetables of the N. of France and Germany, some of which, however, are wanting, on

* Mr. Coxe, Travels in Poland, &c. vol. i. 323, 341, describes the vast forest of Volkonski, as beginning near Viasmar, and continuing to the gates of Moscow, as he travelled through it without interruption for 150 miles. He says that the Volga, Dons, and Neiper, arise in this immense forest, which consists of oaks, beech, mountain-ash, poplar, pines, and firs, mingled together in endless variety.

account of the greater severity of the Russian winters, from their proximity to the vast plains of Tatary, and the forests of Siberia. The trees of most use, and in greatest abundance are, the fir ; the Scotch pine ; the yew-leaved fir ; and the larch : all of which mingled together, form the vast impenetrable forests, whence the rest of Europe is principally supplied with masts, deals, pitch, and tar. The other forest trees are, the elm, the lime, of the inner bark of which the Russian mats are made, and from whose blossoms the immense swarms of wild bees collect the chief part of their honey ; the birch, the alder, the aspen, the greater maple, and the sycamore ; of the shrubs and humbler plants, those of most importance are the cloud-berry, the cranberry, the bear-berry, the stone bramble ; the fruit of all which, for want of better, is highly esteemed, and is either eaten fresh, or is preserved in snow during the winter. Quitting the pine forests of the N. and middle of Russia, if we turn our attention to the few vegetable productions that have as yet been noticed amidst the myriads that adorn and enrich the broad vales of the Don and the Neiper, that glow upon the warm shores of the Black sea, or luxuriate in the delicious recesses of Taurida, we shall see what a rich harvest is reserved for future naturalists, and with what ease the inhabitants, when once become civilized, may avail themselves of the uncommon bounties of their soil. Here rises in stately majesty for future navies, the oak, both the common kind and the species with prickly cups, the black and the white poplars of unusual size, skirt along the margins of the streams, the ash, the horn beam, the nettle tree, occupy the upland pastures, and the elegant beech crowns the summits of the lime stone ridges. Of the fruit-bearing shrubs and trees, besides the gooseberry, the red, the white, and the black currant, which are dispersed in abundance through the woods, there are the almond and peach ; the apricot and crab-cherry : the medlar ; the walnut ; the Tatarian, the black, and white mulberry ; the olive ; the Chio turpentine tree ; the hazle nut ; the fig ; the vine and the pomegranate.

Zoology.] The zoology of Russia is vast and various, and only a very slight sketch can here be attempted. The more peculiar animals are the white bear of Novaya Zemlia, and the souslik of the S. In the more northern parts are found the wolf, the lynx, the elk ; nor is the camel unknown in the lower latitudes. The animals in the centre seem common to the rest of Europe. Among the more useful animals the horse has met with deserved attention, and the breed in many parts of the empire is large, strong, and beautiful.

Even the country near Archangel is remarkable for excellent pasturage and fine cattle, which may be said in general to abound in the empire. The sheep in the northern provinces are of a middle size, short tailed, and the wool coarse ; nor is proper attention paid towards improving the breed. Those in the S. are long tailed, and yield a superior wool ; but the best is from the ancient kingdom of Kazan, and other regions in the east.

In Taurida it is said that common Tatars may possess about 1000 sheep, while an opulent flock is computed at 50,000; those of the whole peninsula were supposed to amount to 7,000,000: nor is the rein-deer unknown in the furthest N.; so that the empire may be said to extend from the latitude of the rein-deer to that of the camel.

Mineralogy.] Peter the Great was the founder of the Russian mineralogy, by the institution of the College of Mines in 1719. As the control of this college extends over the empire, we shall include under this article an account of all its valuable mines. There are two proper *gold mines*. That of Beresof, near Ekaterinenburg, on the Ural, employs 2000 workmen; and, at present, yields annually from 7 to 8 pood of pure gold, valued at from 70 to 80,000 roubles. The whole produce from 1754 to 1788, was 120 pood, valued at 1,200,000 roubles.

The *Voytzer* mines on the mountains of Olonetz have latterly been abandoned.

The *Silver*, mines of Kolhyvan are in the Altaian range. That of the Schlangenburg is one of the richest ever known. The produce of these mines from 1745 to 1787 was 24,460 pood of fine silver, and 830 of gold, valued at 30,000,000 roubles. The whole expence only 7,000,000 roubles.

The silver and lead mines of Nertschinsk are in Dauria near the Amour. From 1704 to 1787 they produced 11,644 pood of silver, and 32 of gold, both valued at 10,000,000 roubles. The *copper* mines in the Uralian chain, had, in 1779, 60 foundries, containing 229 furnaces, and yielded, in 1782, 190,752 pood of copper. A copper mine in the Altai yielded in 1782, 18,793 pood. The value of both was about 2,000,000 roubles. The *iron* mines in the Ural chain yielded, in 1782, 3,940,000 pood of iron; which, added to the product of the mines of Siberia and Olonetz, made a total of about 5,000,000 pood, valued at 4,500,000 roubles. In 1793 the manufactured and unmanufactured iron exported amounted to 3,033,249 pood, valued at 5,204,125 roubles.

Lead is found in all the mines, particularly in those of Nertschinsk, and the Altai. The product of the former is about 30,000 pood. *Arsenic* is found in all the mineral mountains. *Antimony* is abundant in the Nertschinsk mines, and *zinc* ore in those of the Altaian. *Quicksilver* has been found in Nertschinsk, and near Ochotsk. Russia has valuable stores of porphyry, jasper, agate, chalcedony, cornelian, onyx, rock chrystal, beryl, garnet, lapis lazuli, and alabaster. White marble equal to the Parian is found in the Uralian quarries; yellow, grey and cloudy marble are found in the greatest abundance in Wyborg, and Olonetz. Quartz is found every where. The argillaceous earths are abundant. Turf and coal are found in some parts. Sulphur is in sufficient quantities to supply the empire. Glauber and bitter salts, alum, sal ammoniac, vitriol, saltpetre and natron are in vast profusion. Common salt has already been mentioned.

Mineral waters.] European Russia being a plain country can boast of few mineral waters, the most celebrated is near Sarepta

on the Volga, discovered in 1775. The springs are here numerous and copious, and strongly impregnated with iron. In the district of Perekop, and on the isle of Taman, belonging to the government of Taurida, there are springs of Naphtha.*

Natural curiosities.] The natural curiosities of Russia in Europe have scarcely been enumerated, except those which indicate the severity of winter in so northern a clime. Not to mention the rocks of ice, of many miles in extent and surprising height, which navigate the frozen ocean, adorned like cathedrals with pinnacles, which reflect a thousand colours in the sun, or Aurora Borealis; it is well known that the Empress Anne built a palace of ice, on the bank of the Neva, in 1740, which was 52 feet in length, and when illuminated had a surprising effect.

RUSSIAN ISLES.

Nova Zembla, or Novaya Zemlia, is separated from the northern shore of Europe, by the streights of Weygat. It is said to consist of 5 islands, but the passages between them are always filled with ice. The most northern point is called *Ys-hoek* or Icy Cape, and is in lat. 77° N. The number of square miles, as given by Hassel, is 125,264. The island nearest the shore is called Weygatz, on the maps. Nova Zembla is uninhabited. Hunters however resort thither from Archangel and Mezen for rein-deer, white bears, white and blue foxes; and fishermen for whales, belugas, spermaceti whales, morses, dolphins, sea-hogs, seals, sea-bears, sea-lions, and sea-otters. Stockfish, also, and herring and white-fish are abundant in the surrounding ocean. The islands are well supplied with water, but are rocky, unfruitful, and destitute of wood. Ice mountains entirely encompass them on the north. The snow falls to the depth of 9 feet. The sun does not set in May, June, or July.

Kalgueva, or Colguef, is a much smaller island, lying at no great distance east of the mouth of the White Sea. The isle of Cronstadt has been mentioned.



POLAND.

Name.] POLU or Pole in the Sclavonian is said to denote a country fit for hunting, a name very properly applied to Poland as it is one extensive plain with few unevenesses of surface.

Extent.] Before its dismemberment Poland was in size the second country in Europe; its length being about 700 miles and its breadth 680. It lay between 16° and 34° E. and between $46^{\circ} 30'$ and $57^{\circ} 35'$ N. The Dwina and the Neiper separated it from Russia, the Niester from Turkey, and the Carpathian mountains from Hungary.

* Tooke, i. 233.

Divisions.] Lithuania the northeastern part of Poland, was formerly an independent state with the title of a Grand Duchy. In 1386 Ladislaus Jaghellon, the grand duke, and son-in-law of the Polish king, was raised to the throne of Poland. In 1401 an offensive and defensive alliance was entered into between the two states; and in 1413 the nomination of the grand duke was given to the King of Poland. In 1569, Lithuania was made an integral part of Poland, and the King of Poland was constituted ex-officio the grand duke of Lithuania.

About 1320 Gedimin, grand duke of Lithuania, conquered from Russia, Smolensk, Polotsk, Iver, Witebsk, and Kiow with the Slobodian Ukraine east of the Neiper. Several of these were reconquered in 1477. About 1600 Russia lost to Poland Smolensk, Mohilew and Tschernigow. Kiow and the Ukraine were reclaimed by Russia in 1655; at the first dismemberment in 1773 Smolensk, Witebsk, Mobilew and Polish Livonia. In 1793 the second division of this country took place between Russia, Prussia, and Austria; and in 1795 the kingdom was annihilated.

The following table exhibits the divisions of Poland in 1793, the state to which they fell, and their extent in square miles.

Provinces.	Palatinates.	Sq. Miles.
Great Poland on the West to Prussia. In 1807 however with Masovia it was taken from Prussia and both were formed into the Duchy of Warsaw, and given to Saxony,	Pomania Kallitz Birsest Vladislaw Dobrzin Plotzko Rawa Lenzits Sieradz Inowlodz	{ 19,200
Little Poland on the S. W. to Prussia and Austria,	Cracow Sandomir Lublin	{ 18,000
Prussia Royal to Prussia, Prussia Ducal to Prussia, Samagitia to Russia, Courland (Duchy of) to Russia,		6,400 8,900 8,000
Lithuania chiefly to Russia partly to Prussia. In 1807 the southern half of the Prussian part, together with a part of Podolachia, were ceded to Russia, and formed into the province of Bialystock,	Courland Proper Semigallia Wilna Braslaw Polotsk Witebsk Iroki Minsk Micislaf Novogrodek	{ 4,400 64,800
Masovia chiefly to Prussia, partly to Austria, Podolachia chiefly to Prussia, partly to Austria,		84,000 4,000

Provinces.	Palatinates.	Sq. Miles.
Polesia or Birsetsk, chiefly to Russia, partly to Austria,		14,000
Red Russia to Austria,	{ Chelm Beltz Lemburg or Leopold }	25,200
Podolia chiefly to Russia partly to Austria,		29,000
Volhynia to Russia,		25,000
		235,300

Historical Epochs.] 1. The commencement of the authentic history of Poland at the ascension of Piast in 842.

2. The introduction of christianity in 992.

3. The assumption of the title of king by Uladislaus duke of Poland and father of Casimir the great, in 1320.

4. The ascension of the house of Jaghellon, dukes of Lithuania in 1386. They ruled in hereditary succession till 1572. Previous to this the throne had been sometimes hereditary and sometimes elective.

5. In 1574 the throne becomes merely elective in the person of Henry de Valois.

6. John Sobieski king of Poland forced the Turks to raise the siege of Vienna, which was the last valiant action of the Poles.

7. The first dismemberment of the kingdom in 1773.

8. The second dismemberment in 1793.

9. The annihilation of the monarchy in 1795.

Antiquities.] The Polish coinage begins about the 12th century, and is on the German model.

Religion.] Most of the Poles are catholics. The Baltic provinces are inhabited chiefly by Lutherans. There are many of the Greek church in Podelia Volhinia, and the Ukraine ; and a considerable number of Jews and Mahometan Tatars in Lithuania. The whole number of Jews after the first dismemberment was 601,479. There were two archbishoprics and 13 bishoprics in Poland. The monasteries were said to be 576 in number ; the nunneries 117, besides 246 seminaries and 31 abbeys ; the secular clergy 18,369 ; the regular clergy 10,189 ; nuns 2,579.

Government.] Poland was an elective monarchy. The supreme power was vested in the diet consisting of the king, the senate, and the gentry.

The KING was the fountain of honour, of titles, and of offices. He presided in the Diet. The SENATE was composed of spiritual and temporal Lords. The spiritual lords had the precedence. The archbishop of Gnesna was its president. The temporal lords were the Palatines or governors of the palatinates, the Castellans or commanders of the troops in the respective palatinates and the 16 ministers of state. The Senators before the first dismemberment were appointed by the King. The Nuntios or representatives of the gentry were chosen by the gentlemen of each Palatinat. The Diet met ordinarily once in two years and could

continue in session only 6 weeks. Each member of either house had the right of exercising the *Liberum veto*; or, by his single negative, of suspending and preventing every law and every resolution. This was perhaps the prime cause of the ruin of Poland.

Population.] By the first partition in 1773, Russia gained about 1,500,000 inhabitants, Austria 2,500,000, and Prussia 860,000. By the final partition, Russia gained 4,592,544, Austria 2,075,686, and Prussia 1,037,742. The whole gain of Russia was therefore about 6,100,000; that of Austria 4,600,000; and that of Prussia 1,900,000; making a total of about 12,500,000 inhabitants. The territory acquired by Russia was far the most extensive; that of Prussia the most commercial.

Army.] Poland maintained in 1778 a standing army of about 20,000 men of whom 7,500 were furnished by Lithuania.

Revenue.] The disbursements almost always exceeded the revenue. The receipts in 1789 were from Poland 28,237,306 florins, from Lithuania, 9,339,930; total 37,577,236. The expenditures in that year were, Poland 29,809,688 florins, Lithuania 12,763,136; total 42,572,824.

Manners and customs.] The Poles were divided into four classes, nobles, clergy, citizens, and peasants. All who possessed freehold estates, and all who were descended from such were nobles. The clergy were numerous and amenable to the civil power. The burghers were the inhabitants of towns, they had no right to vote for the nuntios. The peasants were slaves transferable like cattle from one master to another. Many of these were Germans introduced into Poland by Casimir the great.

"The features of the Poles and their general appearance are rather Asiatic than European. Men of all ranks wear whiskers and shave their heads, leaving only a circle of hair on the crown. The dress of the higher orders is uncommonly elegant. That of the gentlemen is a waistcoat with sleeves over which they wear an upper robe of a different color, which reaches down below the knee and is fastened by a sash or girdle. The sleeves of this upper garment are in warm weather tied behind the shoulders; a sabre is a necessary part of their dress as a mark of gentility. In summer the robe, &c. is of silk; in winter of cloth velvet or stuff edged with fur. They wear caps bonnets, and buskins of yellow leather, the heels of which are plated with iron or steel. The dress of the ladies is a simple *polonaise* or long robe edged with fur." The Poles are said to be the handsomest nation in Europe. Their law of divorce and various other causes had however before the final dismemberment greatly corrupted their morals.

Language.] The Polish language is a dialect of the Slavonian. That of Lithuania is a different dialect, and very much like the language of the Lettes. Latin is also spoken fluently by the common people.

For the cities &c. of Poland, see Russia, Prussia and Austria.

Universities.] There were three universities in Poland. That of Cracow, in 1778, consisted of 11 colleges, contained 600 stu-

dents, and had the supervisorship of 14 grammar schools. It fell to Austria. Of the other two Wilna belongs to Russia; and that of Posen or Posna fell to Prussia, but now belongs to the new kingdom of Saxony. The great body of the people are extremely ignorant, and learning was never widely diffused in Poland.

PRUSSIA.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, SUBDIVISIONS AND POPULATION, LOSSES, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, ANTIQUITIES, RELIGION, ECCLESIASTICAL GEOGRAPHY, GOVERNMENT, ARMY, REVENUES, POPULATION, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, UNIVERSITIES, CITIES AND TOWNS, EDIFICES, INLAND NAVIGATION, MANUFACTURES, AND COMMERCE.

THIS kingdom, which only commenced with the eighteenth century, by gradual accessions became so extensive, as deservedly to rank till lately among the first powers of Europe. The dominions of Prussia were small and scattered, till the acquisition of Silesia, and afterwards of a third part of Poland, gave a wide basis to the monarchy. But in 1807 it was reduced to the level of a petty German principality.

Names.] This region was faintly known to the ancients, who mention various tribes that possessed it: and the amber, which here only was found in such quantities as to form a regular article of commerce, greatly contributed to its celebrity. The name of the country originates, according to some, from the Pruzzi, a Slavonic tribe; but more probably, according to others, from the name of *Russia*, and the Slavonic word *Po*, which signifies near, or adjacent.

Extent.] The territories of Prussia, before the acquisitions in Poland, were estimated at 56,414 square miles, with a population of 5,621,400. They were greatly enlarged in 1773, and still farther in 1793, when, according to the estimate of Hassel, they contained 121,417 square miles. At that time the kingdom extended from Hornburg and the river Ocker in the country of Halberstadt the farthest western connected limit, to the river Niemen or about six hundred miles. The breadth from the southern limit of Silesia to Dantzig 340; and the average width from the Baltic to the frontiers of Russian and Austrian Poland upwards of 200. On the Baltic it possessed a connected seacoast from the mouth of the Peen, in long. 14 E. to Polangen a little N. of Memel.

Prussia now reaches from the Elbe near Magdeburg, to the Niemen. Its seacoast is entire except the district of Dantzig.

Its boundary on Old Saxony and Lusatia, is as before in about 52° N. Silesia is entire. The acquisitions from Poland are all lost. Its present breadth from the Baltic to the boundaries of Russian and Saxon Poland is from 90 to 100 miles. Its possessions from the southern limit of Silesia to the mouth of the Oder are still uninterrupted; as are those from the Elbe across the Vistula to Polangen. On the Vistula it reaches S. to Schwetz and the mouth of the river Bro. But Culm and Thorn are in Saxony. The present extent in square miles is 62,612. The losses amounted to 58,705.

Divisions.] These with the Population are stated by Hassel in 1809 as follows:

Provinces.	Square Miles.	Population by census.	Estimated do. in 1808.
1. PRUSSIA PROPER.			
1 East Prussia	8,964	555,143	
2 Lithuania	6,466	397,889	1802
3 West Prussia	9,074	524,574	
	<hr/> 24,504	<hr/> 1,477,606	<hr/> 1,478,000
2. DUCHY OF SILESIA.			
1 Lower Silesia	9,008	1,202,061	
2 Upper Silesia	5,458	601,128	1802
3 Glatz	636	101,919	
	<hr/> 15,102	<hr/> 2,021,059	<hr/> in 1805 2,050,000
3. DUCHY OF POMERANIA.			
1 Farther Pomerania	1,783		
2 Hither Pomerania	7,907	{ 1803, 504,311	505,000
	<hr/> 9,690		
4. MARCH OF BRADENBURG.			
1 Kurmark			
1 Middlemark with Beeskow and Storkow	{ 5,512	{ 514,927	1803
2 Pregnitz	1,321	82,540	
3 Uckermark	1,255	88,160	
	<hr/> 8,083	<hr/> 685,627	<hr/> 686,000
2 Newmark	4,159	284,310 (1803)	285,000
3 East Magdeburg	1,079		58,000
	<hr/> 13,316		<hr/> 1,029,000
Total,	62,612		5,030,000

Losses.] The chief losses of Prussia by the peace of Tilsit were in Poland. It lost all that it gained in 1773 and 1793, except the province of Lithuania, as it is called by Hassel, or the northern part of New East Prussia, which bounds N. and E. on the Niemen, and now extends S. nearly to Grodno. The southern part of that province, and as far W. as the Narew was taken by Russia, and called Bialystock. South Prussia was made into the *Duchy of Warsaw*, and given to the kingdom of Saxony. The district of Dantzig was taken from Pomerania, and made one of the New Hanse Towns. The principality of Neufchatel, on the borders of Switzerland, was made a part of France: as was that of Bayreuth,

in Franconia. The Marquisate of Anspach, in Franconia, was annexed to Bavaria. The Principality of East Friesland, in Westphalia, the district of Guelders and that of Moeurs of Meurs, were added to the kingdom of Holland, and with that kingdom in 1810, became a part of the French empire. Stendal and Salzwedel W. of the Elbe in Brandenburg ; the Principality of Halberstadt and the part of that of Magdeburg, which lay west of the Elbe, in Lower Saxony ; and those of Minden and Ravensberg in Westphalia were assigned to the kingdom of Westphalia. While the Duchy of Cleves, and the counties of Marck, Tecklenburg, and Lingen, now make a part of the Grand Duchy of Berg.

Table of Losses in 1807.

	Square Miles.	Population.	
Bialystock	6,379	183,300	
Duchy of Warsaw	40,570	2,777,000	
District of Dantzic	416	84,000	
Neufchatel	362	47,000	
East Friesland	1,247	133,000	
Guelders	250	48,000	
Moeurs	64	17,000	
Bayreuth	1,255	233,000	
Anspach	1,260	316,141	(1806)
Cleves	613	83,456	(1806)
Marck	1,008	137,890	(1806)
Tecklenburg	110	20,059	(1806)
Lingen	175	25,021	(1806)
Stendal	709	50,799	(1807)
Salzwedel	1,020	43,853	(1807)
West Magdeburg	1,802	259,210	(1807)
Halberstadt	489	79,443	(1807)
Minden	580	77,012	(1807)
Ravensberg	396	91,802	(1807)

Original Population.] The original population of Prussia appears from Tacitus and Pliny, to have consisted of the Peucini and \AA stii, Gothic tribes bordering on the Venedi, who were Slavons. The amber of the \AA stii continued to be celebrated in the time of Theodoric ; but at what precise period these original inhabitants were expelled, or subdued, by the Slavonic tribes on the east, remains uncertain. Suffice it in general to observe that the Slavonic tribes extended widely over the N. of Germany ; after the old Gothic inhabitants had crowded to the more fertile regions of the S. in consequence of the decline and fall of the Roman empire.

Progressive Geography.] The progressive geography of those provinces which now constitute the Prussian territory, would form an embroiled and multifarious topic. One of the most singular features in the geography of these regions, during the middle ages, is the existence of Julin, a city of great extent and commerce, on the right bank of the Oder in Pomerania, which was destroyed by Waldemar king of Denmark. Farther to the E. the

Slavonic tribes on the Baltic continued pagans to a late period ; and the country was little known or visited, except by a species of crusaders, who went to assist the Teutonic knights in subduing those Saracens, as they were styled in the ignorance of the times.

Historical Epochs.] As this kingdom is recent, and composed of several ancient states, its historical epochs and antiquities are of course complex. Not to mention the smaller provinces, among which is the distant principality of Neufchatel, on the frontiers of France and Switzerland, Prussia may be regarded as consisting of four great divisions, the electorate of Brandenburg ; the kingdom of Prussia proper ; the large province of Silesia ; and a third part of the ancient kingdom of Poland. As the family which now rules those extensive domains was originally the electoral house of Brandenburg, it will be proper first to trace the progress of its power.

1. The emperor Charles IV. in 1373, assigned Brandenburg to his second son Sigismund, who in 1415, being then emperor of Germany, sold this margraviate and electorate to Frederick burgrave of Nuremberg, for 400,000 ducats. This prince was the ancestor of the present reigning race.

2. Joachim II. elector of Brandenburg, embraced the Lutheran religion in 1539, which has since been the ruling system of the state.

3. John Sigismond becomes duke of Prussia in 1618.

4. Frederic William, surnamed the great elector, succeeded his father in 1640 ; and in 1656 compelled the king of Poland to declare Prussia an independent state, it having formerly been held of the Polish sovereigns. This prince is highly praised by his royal descendant, the author of *Memoirs of the house of Brandenburg*, as the chief founder of the power of that family. He was succeeded in 1688, by his son,

5. Frederic III. who supporting the emperor in the contest for the Spanish succession, was by him declared king of Prussia ; under which title he was proclaimed at Konigsberg, on the 18th day of January, 1701, he himself placing the crown upon his head.

6. Frederic William II. ascended the throne in 1713 ; and in 1721 founded the city of Potsdam. But he was chiefly remarkable as the father of that great prince Frederic II. who ascended the throne in 1740, and died in 1786, after a long and glorious reign ; the most memorable and lasting event of which was the acquisition of Silesia from the house of Austria in 1742.

7. The short reign of his nephew is known to every reader. The failure of the Prussian tactics in France and Poland convinced Europe that the great Frederic had been the soul of the machine. But these checks were recompensed by the completion of the Prussian acquisitions in Poland. The reign of his son, the present monarch, has hitherto been distinguished rather by prudence than enterprize.

The historical epochs of Prussia proper are not deserving of

* In the regal genealogy the name of Frederic alone is considered as distinct from that of Frederic-William.

much elucidation. The knowledge of the ancients concerning this country has already been explained. A faint dawn of history, in the middle ages, discloses at the mouth of the Vistula the Pruzzi, a Slavonic nation, who were afterwards subdued by the knights of the Teutonic order.

1. This order originated A. D. 1190, in the camp of the Crusaders before Acca, or Acre, from some citizens of Lubec and Bremen. Next year a bull of institution was obtained from the pope, with all the privileges granted to the knights templars. The crusades to Palestine having failed, the knights directed their enterprise against the pagans of the N. of Germany, A. D. 1227; and in a few years conquered Prussia, and founded several cities.

2. The knights thus established in Prussia directed their efforts against the Lithuanians, and other pagans in the east. But repeated wars with Poland were less fortunate; and about 1446 the four chief cities of Prussia, Elbing, Thorn, Konigsberg, and Dantzig, withdrew their allegiance from the Teutonic order, and claimed the protection of Poland.

3. In 1466, Casimir king of Poland, forced the Teutonic order to abandon to him the eastern part of Prussia, and to pay homage for the western part.

4. Albert of Brandenburg, grand-master of the order, obtained from his maternal uncle, Sigismund king of Poland, the hereditary investiture of all that the order possessed in Prussia, and embraced the Lutheran religion.

5. In 1618, John Sigismund elector of Brandenburg acquired this duchy; and in 1621 his successor received the solemn investiture from the king of Poland.

Silesia affords few materials for history. This country was formerly a Slavonic province of the Polish dominion; but in 1339 was seized by John of Luxemburg king of Bohemia, and passed with that sovereignty to the house of Austria. The house of Brandenburg certainly had some ancient claims to this province, which were finally ascertained by the sword in 1742, as already mentioned. The chief epochs of the Polish history have already been repeated.

Antiquities.] From this general view of the component parts of the Prussian history it will appear that few ancient monuments can be expected in regions, where even a rude knowledge of the arts is comparatively so recent. Some Slavonic idols, cast in bronze, constitute almost the only pagan antiquities; and the castles, and churches, erected after the introduction of the Christian religion, have few singularities to attract particular attention.

Religion.] The ruling religion of Prussia is the protestant, under its two chief divisions of Lutheran and Calvinistic. The universal toleration wisely embraced by the Prussian monarchs, has had its usual effect of abating theological enmity, and the different sects seem to live in perfect concord.

Ecclesiastical Geography.] The ecclesiastical geography of Prussia would be at once little interesting, and of difficult detail. The bishoprics in Poland and Silesia seem to retain their an-

cient limits, while the power of the prelates is considerably abridged.

Government, &c.] As no vestige of any senate or delegates from the people is known in this kingdom, it must be pronounced an absolute government; but the spirit and good sense of the nation unite with the wisdom and mildness of successive monarchs, (who have uniformly wished to invite foreign settlers by views of ease and freedom, instead of expelling their own people by rigor,) to render the sovereignty as conciliatory, and perhaps more beneficent, than if joined with a venal senate. The late great monarch reformed many abuses in the laws; but it cannot be disguised that the tenour of his government was too military, a fault inherent in the Prussian system.

Army.] The army of Prussia in 1806 amounted to 239,667 men, viz.

Infantry	175,307
Cavalry	40,476
Artillery	13,240
Sundry troops	7,470
Guards	3,174

The unfortunate monarch in 1808 had only from 60,000 to 80,000 men, and of these only 20,000 were equipped and ready for service.

Revenues.] In 1808 the revenues were as follows,

	Guilders.
From the March of Brandenberg	8,300,000
From the Duchy of Silesia	9,000,000
From the Duchy of Pomerania	3,000,000
From Prussia proper	6,000,000

26,300,000 guilders

or about 13,150,000 dollars, the guilder being worth 51.85 cents. Before the peace of Tilsit the revenue was annually from 56 to 58,000,000 guilders. The debt of Prussia is stated by Hassel at 50,000,000 guilders.

Population.] The number of inhabitants in Prussia, in 1808 after the peace of Tilsit was, according to Hassel's tables, 5,030,000. The number of houses was 516,600; of cities 431; of market towns 81; of villages 20,687. The number of houses in 1806 was 1,410,721; of cities 1062; of market towns 219; of villages 46,345.

Prussia lost to the kingdom of Westphalia 602,119 inhabitants; to the Grand Duchy of Berg 266,436; to Bavaria 316,141; to France about 478,000; to the New Hanse Towns about 84,000; to the kingdom of Saxony about 2,777,000; and to Russia about 183,300. Sotzman, a German writer, estimates the total loss at 4,805,000 which differs but little from the preceding statement and estimates of Hassel.

Manners and Customs.] The manners and customs of a country composed of such various inhabitants, recently united under

one sovereignty, must of course be discordant. Travellers have remarked that in comparison with the Saxons, who are a lively and contented people, the Prussians appear dull and gloomy; a character which they impute partly to the military government, and partly to the general anxiety which must have been excited by the repeated dangers to which their country was exposed, when contending with the powers of Russia and Austria.

Language.] The ruling language of Prussia is the German; which it is probable may in time supplant the Polish, in those parts which are subject to Prussia and Austria.

Literature.] The literature of Prussia may well be conceived to be of recent origin; nor even after the restoration of letters did any remarkable author arise in the electorate of Brandenburg. But Dantzig was the native country of Cluverius, an eminent geographer; and Copernicus a great name in astronomy, was born at Thorn, as his predecessor Regiomontanus was at Konigsberg, his name being a Latin translation of that of his birth-place. Silesia has likewise few pretensions to literary fame, nor are those of Poland highly illustrious. Kadlubko, the most ancient Polish historian, wrote in 1223; and since his time there has been a succession of Latin chroniclers. Frederic the Great had a mean opinion of German literature; and though he wrote in French, must be classed among the most distinguished authors of his kingdom. Nor is count Hertsberg, his minister, without merit. Among the other names, either natives or who flourished in Prussia, may be mentioned Ramler the poet, Nicolai an original writer of romances, &c. Busching the geographer, Spalding, and Mendelsohn.

Education.] The state of education in this country seems to be equally neglected as in the far greater part of Europe. The number of recruits wanted for the army, and the consequent uncertainty of destination for life, must singularly impede the national instruction.

Universities.] There are however several universities, such as that of Frankfort on the Oder, founded by Joachim elector of Brandenburg in the year 1516. Konigsberg in Prussia was founded in 1544.

Cities and Towns.] Berlin the largest of all the Prussian cities, and the second in Germany, is built on the banks of the Spree, in lat. $52^{\circ} 31' 44''$ N. and lon. $13^{\circ} 28'$ E. It was founded in the 12th century by a colony from the Netherlands. It is chiefly built on a barren sandy plain, much exposed to dust. A part of it however stands upon two islands in the river. It is $4\frac{1}{2}$ miles long and 3 broad, containing in 1804, 156,664 inhabitants, and 7241 houses. The houses are uncommonly beautiful from without, but the finishing within does not correspond with the elegance of the exterior. The streets are regular and of convenient breadth. There are 14 Lutheran churches, 10 Calvinistic and 1 Catholic, all strangely decorated with Mercuries, Apollos, Minervas, and Cupids. The town is surrounded by a wall and palisadoes. The average of temperature for 13 years, from 1769 to 1782, was 49 degrees. There is a free communication by canals, with the Oder and the Elbe.

Konigsberg was founded by the Teutonic Knights, in 1255, and is well fortified. It stands on the Pregel near its entrance into the Frisch-Haff, and maintains a considerable commerce with the Baltic. It contained 4,508 houses in 1802, and 56,410 inhabitants. It is the capital of Prussia Proper.

Breslaw, the capital of Silesia, has long been celebrated, as one of the most beautiful cities of Germany. It is of uncertain antiquity, but was burnt by the Tatars in 1241. It stands upon the S. bank of the Oder, in lat. 51° 3' N. lon. 17° 8' 45" E. and contained in 1805, 62,923 inhabitants and 3,338 houses. The town is very extensive, being not less than 8 miles in length. There are 9 Lutheran Churches, 1 Calvinistic, 1 Greek, several Catholic, and 2 Jewish synagogues.

Elbing is in West Prussia, on an arm of the Vistula, called the River Elbing, a short distance from the Frisch-Haff, in lat. 54° 7' 54" N. lon. 10° 27' 27" E. It was built by a colony from Lubeck in 1239, and was in the Hanseatic League, till the end of the 16th century. Houses in 1802, 2,159. Population 19,274. Its commerce has always been considerable. In 1803, it owned 7110 tons of shipping, besides 50 coasters and 25 lighters, employed to take cargoes to the large ships at Pillau. Vessels of 100 tons come up to the town. It has a large manufactory of soap, one of tobacco, two of weed ashes, two of starch, a sugar-house and a saw-mill for cutting deals.

Stettin stands upon the Oder, in lat. 53° 25' 36" N. The river here divides into 4 branches. The town carries on an extensive commerce, and contained in 1802, 1594 houses, and 18,463 inhabitants.

Potsdam a recent city, is built on an island in the Havel, in lat. 52° 24' 43" N. and long. 13° 10' 31" E. No expense has been spared in its decorations. The inhabitants, in 1802, amounted to 17,982; the houses to 1959. It was till lately the favorite residence of the Prussian monarchs.

Brandenburg is also on the Havel, 31 miles from Berlin. It was made a Bishop's See in 949. Manufactures of cloth, fustian, and canvass have been established by the French Calvinists. There is a lake near the town two miles long. Inhabitants in 1802. 10,329. Houses 1485.

Frankfort on the Oder, is in Middlemark, 48 miles E. of Berlin. It contained in 1802, 1314 houses, and 10,291 inhabitants.

The other towns are in Silesia, Brieg, 8,682 inhabitants; Schweidnitz 8,232; Neisse, 7,489; Glatz 6681; Hirschberg, 5,996: in Prussia Proper, Tilsit 8,656; Marienburg, 7,172; Braunsberg, 5,798; Memel, 5,111; Christrin, in Brandenburg, 5,400; and Stargard in Pomerania, 6,749.

Edifices.] Some of the most splendid edifices of this country adorn Berlin the capital, such as the palace and the theatre. But the other grand buildings seem not to have impressed travellers with veneration, being barracks for soldiers and the like.* And

* Wraxall's Mem. i. 101.

the city itself is almost entirely built with brick, though the fronts of the houses are disguised with stucco. The palace at Potsdam deserves superior applause ; and on an eminence near the city stands the royal villa of Sans Souci, which however can claim no grandeur of external architecture. Konigsberg, and Dantzig, also offer to view respectable public buildings ; but in general this kingdom yields even to Russia in this respect.

Inland Navigation.] The advantages of inland navigation seem little known or cultivated in the Prussian dominions ; and though several small canals might be mentioned, yet they rather belong to the office of the topographer than to a general system of geography.

Manufactures and Commerce.] If we except the linens of Silesia, the manufactures of the Prussian dominions are of small importance. Yet they afford for home consumption, glass, iron, brass, paper, and woollen cloth ; and Frederick II. introduced a small manufacture of silk. Even the exports of Dantzig consist almost entirely of timber, corn, tallow, and similar articles.

If we except the ancient staple of grain so abundant in the level plains of Poland, the commerce of Prussia is comparatively of but little consequence. Amber is by nature constituted a monopoly of the country, but fashion has rendered this branch of commerce insignificant. Yet among the considerable exports may be named excellent timber of all kinds, skins, leather, flax, and hemp, madder, linseed, pearlash, and every species of grain ; nor must the linens of Silesia be passed in silence, many of which are sent into Holland, and sold under the name of Dutch manufacture. In return Prussia receives wine, and other products of more southern and favoured countries.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Climate and Seasons.] THE climate of the Prussian dominions is, upon the whole, cold and moist. Brandenburg and Pomerania may be regarded as more free from humidity than Prussia proper, which, as Busching informs us,* has about eight months of winter, the autumns being often deluged with rain. The northern part of Poland, which has fallen under the Prussian sceptre, abounds with forests and marshes, which cannot be supposed to render the air salubrious. The lower parts of Silesia are regarded as the most healthy and fertile provinces of the monarchy ; but the southern and western parts of that duchy, bordering on elevated mountains, long covered with snow, are exposed even in summer to severe freezing gales.

* iii. 5:

Face of the Country.] In considering the general appearance of these extensive regions, Brandenburg is a sandy, and barren country, but Prussia proper formerly abounded in woods, and displays superior fertility, a character which may also be extended to Prussian Poland, an immense plain. Silesia on the contrary, displays a pleasing diversity, being level and open towards Poland, but separated from Hungary on the S. by the Carpathian mountains, a branch of which proceeding N. W. divides this country from Moravia and Bohemia. It is every where watered by the Oder and its tributary streams: nor is there any deficiency of rivers in the other parts of the Prussian sovereignty.

Soil and Agriculture.] The soil of Brandenburg is meagre, and even the space between Berlin and Potsdam resembles a wilderness; but that of Prussian Poland is loamy and fertile. The northern extremity of Silesia resembles Brandenburg, yet this province is in general extremely productive, and abounds in fruits and culinary vegetables.

Agricultural improvements are little known, and Brandenburg chiefly produces buck wheat and turnips, with scanty crops of rye; but Prussia proper, and the Polish provinces display every kind of grain, and esculent plant, that can flourish under such a latitude; and among the productions of Silesia must be classed maize, and even vines, but the wine is of inferior quality.

The peasants, though oppressed by heavy taxation, being free from the wanton extortions, and capricious personal services, exacted by the Polish aristocracy, display signs of comparative ease and prosperity. In different parts of Silesia the land is let in farms, as in England, and the peasants hired as day labourers; while under the detestable government of Poland they were mere slaves, and every avenue to industry was barred.

Rivers.] Among the chief rivers of the Prussian dominions may be first mentioned the Elbe, which rises in the S. of Bohemia, and pervades the duchy of Magdeburg. The Spree, which passes by Berlin, falls into the Havel, a tributary of the Elbe. The Oder, the *Viadrus* of the ancients, may be regarded as a river entirely Prussian; it rises in the mountains of Moravia, and, after watering Silesia, Brandenburg, and Pomerania, joins the Baltic, after a course of about 350 miles. Next appears another noble stream, the Vistula, which, rising in the Carpathian mountains, passes Warsaw, and joins the sea near Dantzig, after a circuit of about 450 miles. The Pregel, passing by Konigsberg, springs from some lakes and marshes in Prussian Poland; and the Memel, a superior river, now forms in part the Prussian boundary on the east.

Lakes.] The lakes in the Prussian dominions are numerous, especially in the eastern part, where among others may be mentioned the Spelding See, which, with its creeks, extends more than twenty British miles in every direction. That region contains many other lakes, which supply the sources of the river Pregel. At their estuaries the rivers Oder, Vistula, and Memel, present singular inland sheets of water, in the German language call-

ed Haff's; that of the Oder being styled Grass Haff; that of the Vistula, Frisch Haff (with another inland creek called the lake of Drausen;) and that of the Memel, Curisch Haff. The Frisch Haff is about seventy miles in length, and from three to ten miles broad, being separated from the Baltic by a long slip of land, said to have been thrown up by the tempests and waves about the year 1190. This lake or bay is of small depth, and will not admit vessels of much burthen.*

The Curisch Haff, so called from its situation in the ancient duchy of Courland, is about 60 British miles in length, and about 30 in its greatest breadth. A similar ridge of land divides it from the Baltic; and it is full of dangerous shelves, and infested by frequent storms.

Mountains.] Magdeburg, Brandenburg, Pomerania, Prussia, and Poland, are in general level countries; and the only mountains in the Prussian dominions are those of Silesia. The mountains in the S. and W. of this province may be regarded as a northern branch of the Carpathian chain, which itself forms the most southern boundary. This branch extends from Jablunka S. E. to Friedberg in upper Lusatia, N. W. near 200 British miles in length, and is called Sudetische Gebirge, or the Sudetic mountains. In the north western parts of Silesia are also detached mountains of considerable height,† as the Spitzberg and Gratzberg. Their precise height seems not to be ascertained, yet they may safely be concluded to yield greatly to the Carpathian chain, an account of which will be found in the description of the Austrian dominions.

Forests.] Few parts of the Prussian kingdom are destitute of woods and forests, which particularly abound in Prussia proper, and in the recent Polish acquisitions. Towards Hungary, Silesia presents a continuation of thick forests, which conspire with the elevated mountains to form an impenetrable barrier.

Botany.] The indigenous vegetables of the Prussian dominions have hitherto been viewed in only a very cursory manner. Among these there do not seem to be any which have not already been sufficiently noticed in the preceding accounts of Britain and Austria. The mountainous ridges of Prussia being few, and of little importance, there is in consequence a great deficiency of alpine plants, the prevailing vegetables being those that inhabit level and sandy districts. Tobacco, originally a native of America, and probably also of the east, having been long cultivated in Prussia, has at length established itself in the soil, and is found in the plowed fields and hedges as a common weed.

Zoology.] The breeds of horses and cattle seem not to have impressed travellers with any distinction from those of the adjacent countries; and few parts are calculated for excellent breeds of sheep. The urus, or large and ferocious wild cat of Lithuania, have also appeared in Prussia proper, but the race seems nearly extinct. One of its chief haunts was the forest of Masavia not far from Warsaw.

* Busching iii. 10.

† Ibid. vi. 214.

Mineralogy.] The mineralogy of the Prussian dominions will not afford an extensive theme. Sand and plains rarely contain minerals, and even the mountains of Silesia boast of few hidden treasures. Yet in the southern districts of that province there were formerly mines of gold and silver, but the produce did not defray the expense. Mines of copper and lead however still exist, and there are considerable foundries of iron. Agates, jaspers, and rock crystal, are also found in the Silesian mountains. Coal, a more useful mineral, occurs in various parts of Silesia, and the level districts sometimes offer good peat moors.

But the most distinguished and peculiar mineral production of Prussia is amber, which is chiefly found on the Samland shore of the Baltic, near Pilau, on a neck of land formed by the Frisch Haff, which seems to have been the chief seat of this mineral from the earliest ages. It is found at the depth of about 100 feet, reposing on wood coal, in lumps of various sizes, some five pounds in weight, and is often washed on shore by tempests. It adds about £5000 yearly to the royal revenue.

Mineral waters.] Silesia presents one spring of hot water at Warmbrun, near Hirschberg, which is believed to be the only mineral water worth notice in the Prussian dominions.

Natural curiosities.] The Sudetic chain of mountains has been little explored, and the level parts of the Prussian dominions can, of course, afford few objects of natural curiosity, if we except the mines of amber above-mentioned.

LOW COUNTRIES.

THE Low Countries include the seven United Provinces, or Holland, and the Austrian and French Netherlands. They obtained the general name of Low Countries from their relative situation and elevation with regard to Germany. Though they are now an integral part of the French Empire, we have still concluded to give them a separate description. The natural characteristics of these countries are entirely different from those of France; the inhabitants of all of them are wholly unlike the French in their origin, history, language and character, and those of Holland also in their religion. These facts authorize us to hope that the first great change in Europe will release them from their present thralldom; and that Holland, at least, may again be ranked among independent nations.

HOLLAND.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, DIVISIONS, COLONIES, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, ANTIQUITIES, RELIGION, GOVERNMENT, LAWS, POPULATION, ARMY, NAVY, REVENUE, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, CITIES AND TOWNS, INLAND NAVIGATION, MANUFACTURES AND COMMERCE.

Names.] HOLLAND was a part of *Gullia Belgica*. Its appropriate name was *Batavia* from the *Batavi*, a people highly celebrated by Tacitus. The limits of *Batavia* were not however equally extensive with those of modern Holland. The name of *Holland* is said by some to be derived from the German word *Holtland*, signifying woodland. Pinkerton with more probability says the country was so called from the German word *Hohl*, corresponding to the English word *hollow*. The name was originally given only to the largest of the provinces, but in process of time was transferred to the whole seven. The people are called *Dutch*, and sometimes *Low Dutch*, from the German *Deutsch* or *Teutsch*; as the Germans are *High Dutch*: *Deutschland* properly signifying the whole extent of Germany and the Low countries.

Extent.] The length of Holland from the N. of Groningen to the southern boundary along Austrian Flanders and Brabant is about 150 miles; the breadth is 100. The square miles before the late addition of East Friesland on the N. E. from Germany, were, according to Hassel, 11,415, East Friesland with Fever, Varel, and Kniphausen, contains 1247.

Divisions.] There were originally seven provinces in Holland. Zealand and Holland lay on the W. Friesland and Groningen or Zutphen on the N. Overyssel and Guelders on the E. and Utrecht on the S. Dutch Flanders was afterwards annexed on the S. W. and Dutch Brabant a much larger territory on the S. and S. E.—When the United Provinces in 1806 were erected into a kingdom, East Friesland was added to it on the N. E. Holland was divided into Amstelland and Maasland; Drente was taken from Overyssel, and formed into a distinct territory; Brabant was made an integral part of the kingdom; and Dutch Flanders was annexed to France. The following is Hassel's table of the Departments, with their extent and population in 1809.

1. Amstelland,	960	458,000
2. Maasland,	1296	341,978
3. Utrecht,	513	108,820
4. Zealand,	414	74,050
5. Brabant,	1689	207,708
6. Guelders,	2091	323,282

7. Overyssel,	1337	135,060
8. Drente,	815	39,672
9. Friesland,	1192	96,846
10. Groningen,	1107	103,000
11. E. Friesland,	1247	133,000
	12,662	2,001,416

Colonies.] The foreign possessions of Holland were extensive and valuable before the commencement of the French Revolution. Since that event they have all except Batavia fallen into the hands of the English.

I. In Asia. 1. Factories at Gomson and Bassora in the Persian Gulf. 2. At Surat Petra, &c. 3. Cochin and several other settlements on the Malabar and Coromandel coasts. 4. The Sea coast of the island of Ceylon. 5. The Government of Batavia in Java 916,000 inhabitants. 6. Island of Madura 60,000. 7. Government of Amboyna Banda Ternate Tidor Motyr and Bachian 300,000. 8. Government of Malacca. 9. Possessions in Borneo, Celebes and Timor. 10. Chinsura in Bengal. Population of the three last 500,000. (Hassel.)

II. In Africa. 1. Cape of Good Hope. 2. Thirteen small factories on the Coast of Guinea.

III. In the West Indies. 1. Carraças. 2. Eustatia and Saba. 3. St. Martyn.

IV. In South America. Surrinam, Essequebo, Berbice and Demarara.

Original Population.] The original population appears to have been Celtic: but when the Romans conquered this country, the chief inhabitants were the Batavi, the most northern people of Belgic Gaul, and uncontestedly a German or Gothic progeny; who appear to have been secure in their marshes and islands, till the Frisians, the next adjacent people in the north, in the seventh century extended themselves even down to the Scheld. In the eighth century the Frisians were subdued by the Franks under Charles Martel; but the Frisians and Franks may be regarded as mingled in the population with the ancient Batavians.*

Progressive Geography.] The progressive geography of this region becomes curious and interesting, from the singular phenomenon of the increase of the sea. Upon inspecting the accurate maps of the ancient and middle geography of Gaul by D'Anville, it will be perceived that the Rhine divided itself into two grand branches at Burginassium or Schenk, about 5 miles N. W. of the Colonia Trajana, now an inconsiderable hamlet called Koln near Cleves. The southern branch joined the Meuse at the town of Mosa or Meuvi; while the northern passed by Durstadt, Utrecht, and Leyden, into the ocean. From the northern branch was led the canal of Drusus, which originally joined the Rhine to the Issil, a river that flowed into a considerable inland lake called Flevo, now a southern portion of the Zuyder Zee. This canal of Drusus

* D'Anville, *Etats form. en Europe*, p. 26.

being neglected, and left to the operations of nature, the Rhine joined the Issil with such force that their conjunct waters increased the lake of Flevo to a great extent; and instead of a river of the same name, which ran for near 50 Roman miles from that lake to the sea, there was opened the wide gulf which now forms the entrance. The northern and chief mouth of the Rhine was, at the same time, weakened and almost lost by the division of its waters, and even the canal of Drusus was afterwards almost obliterated by the deposition of mud in a low country, in the same manner as some of the ancient mouths of the Nile have disappeared in the Delta of Egypt.

The southern branch of the Rhine, which flowed into the estuary of the Meuse, as above mentioned, was anciently called Vahalis, a name retained in the modern Waal; the ancient isle of the Batavi being included between the two branches of the Rhine, and thus extending about one hundred Roman miles in length by about 22 at the greatest breadth. The estuaries of the Meuse and the Scheld have also been open to great inroads from the ocean: and the latter in particular, which anciently formed a mere delta, with four or five small branches, now presents the islands of Zealand, and the most southern of those of Holland, divided by wide creeks of the sea. This remarkable irruption is supposed to have happened at the time that the Goodwin sands arose. These great changes may be conceived to have made a slow and gradual progress; and none of them seem so ancient as the time of Charlemagne. Some of them are so recent as the 15th century; for in 1421 the estuary of the Meuse, or Maese, suddenly formed a vast lake to the S. E. of Dort, overwhelming 72 large villages, with one hundred thousand inhabitants, who perished in the deluge.*

By a subsequent change the Rhine was again subdivided; and a chief branch fell into the Leck, which joins the estuary of the Meuse between Dort and Rotterdam, and must now be regarded as the northern mouth of that noble river; while the Vahalis or Waal continues to be the southern: both branches being lost in a comparatively small stream the Meuse. The less important variations in the geography may be traced with some precision in the Francic historians, and other writers of the middle ages.

Historical Epochs.] Among the chief historical epochs may be numbered;

1. The actions of the Batavi in the Roman period, from the first mention of that nation by Julius Cæsar.
2. The conquest by the Frisians, and afterwards by the Danes, and by the Franks.
3. The countries watered by the Meuse and the Rhine were for a long time divided into small earldoms; but in the year 923 Theodoric or Diedric, brother of Herman duke of Saxony, and of Wickman earl of Ghent, was appointed count of Holland by

* Cluver. 96. Guicciardini, 271. Some authors arbitrarily assign these changes to violent tempests, A. D. 860; others to 1170. A Zealandic chronicler, quoted by the same author, says that the islands of Zealand were formed by violent tempests in the year 938, a date which seems to deserve the preference.

Charles the simple, king of France, and the title became hereditary. Zealand and Friesland were included in the donation. The county of Gelderland on the E. was erected by the emperor Henry IV. in 1079, and became a duchy in 1339. Utrecht was subject to its powerful prelates, who had frequent contests with the earls of Holland.

4. Frequent contests appear between the earls of Holland and those of Flanders, concerning the possession of the islands of Zealand. Philipina, daughter of William III. earl of Holland, was married to the prince of Wales, afterwards Edward III. of England, a princess worthy of an heroic husband. This king afterwards contested the earldom of Holland with Margaret his sister-in-law. Jacquelin the heiress of Holland in 1417 wedded John IV. duke of Brabant; but her uncle John of Bavaria, who had resigned the bishopric of Liege in the hopes of espousing her, contested the succession. A kind of anarchy following, Jacquelin went to England, where she married in 1423 Humphry duke of Gloucester; and this marriage being annulled by the pope, she wedded in 1432 Borselen stadholder of Holland; and the next year was forced to resign her states to Philip the Good, duke of Burgundy.

5. Holland with other large possessions of the house of Burgundy, fell by marriage to the house of Austria.

6. Holland and some inferior provinces revolt from the tyranny of Philip II. in 1566; and in 1579 formed the famous union of Utrecht.

7. By the end of that century the Dutch had established colonies at the Cape of Good Hope, and in the East Indies; and settlements were afterwards gained in South America. During the 17th century they rivalled the English in the empire of the sea; and greatly exceeded them in commercial advantages. Their power began somewhat to decline after the obstinate naval conflicts in the time of Charles II. In 1672 Louis XIV. invades Holland; and Amsterdam is only saved by opening the sluices.

8. The stadholderate declared hereditary 1747. The war in 1756 opening great connexions between Holland and France, a French party began to form in the country, which opposed the stadholder, who was supported by the English. In 1780 a war arose between Great Britain and Holland, which closed in 1784, after exposing to Europe the decline and weakness of the United Provinces, still farther displayed by the entrance of the duke of Brunswick in 1788, who may be said to have subdued them without a blow.

9. The Dutch having joined the coalition against the French, their country fell a prey to the invaders, during the hard frost of the winter 1794-5; and the stadholder took refuge in England in 1795.

10. Holland was created into a kingdom and given to Louis Bonaparte in 1809.

11. The king was deprived of his crown on account of his clemency, and Holland was annexed to the French empire in 1810.

Antiquities.] The ancient monuments of the United Provinces are far from being numerous or interesting. The chief remain of the Roman period is the ruined tower near Catwick, about six miles N. W. from Leyden, at the ancient mouth of the Rhine. In the middle of Leyden, upon an artificial hill, stands a round tower, fabled to have been built by Hengist who first led the Saxons to England. Among the antiquities of the two middle ages may be particularly named the church of Utrecht, with a tower of great height, commanding as it were a map of the surrounding country, and worthy of the great power of the ancient bishops of that see.

Religion.] Calvinism was the established religion of Holland. The states in 1583 proposed that no other form should be tolerated; but this was wisely rejected. None but calvinists however could hold any employment of trust or profit.

The officers of the church are pastors, ruling elders, and deacons. All the clergy are on a level. The church is governed by consistories, classes, provincial synods, and a national synod. A consistency is usually composed of the clergy and elders of a particular town, and regulates the affairs of the individual churches there. A class consists of deputies from several consistories, and meets three times a year. The provincial synods have the oversight of the churches and clergy of each province. They assemble every year. They were all subject to a national synod, which met only on the most important occasions, when essential doctrines were to be discussed and settled. The last was that of Dort in 1618. The national synod was subject to the control of the States general which were considered the head of the church.

The following table exhibits the state of the established church in 1759, 1797 and 1803.

	Classes.	1759.	Ministers.	1803.
1. Gelderland	9	284	283	285
2. South Holland	11	331	332	331
3. North Holland	6	222	218	220
4. Zealand	4	173	159	163
5. Utrecht	3	81	82	79
6. Friesland	6	208	209	207
7. Overyssel	4	84	84	84
8. Drente	3	40	42	40
9. Groningen	7	161	161	161
	—	—	—	—
	53	1584	1570	1570

Besides these there were, in 1797, 2 ministers in the island of Ameland, and 52 in the colonies; viz. 9 in the W. Indies and 43 at the Cape of Good Hope and in the E. Indies.

The Walloon calvinist churches are 50 in number, and are superintended by a general synod which is the oldest body of the reformed church in the Low Countries. There were, in 1803, 7 English Presbyterian congregations, 1 Scotch, and 2 English Episcopalian.

The number of catholic churches then in the seven provinces

was 350, of priests 400. Of these 51 churches and 74 priests were of the Jansenist party. The rest were Jesuits. There were of the Lutherans 41 congregations, and 70 ministers; of the Remonstrants 34 congregations, and 43 ministers; of the Anabaptists, in 1791, 169 congregations, and 251 ministers; and of the Rhinsburgers 20 congregations. There are also a very few Quakers, one congregation of Arminians, and a considerable number of Jews in the large cities.

Government.] Each of the Seven Provinces was a republic, retaining its own states, which consisted of nobles and burgesses; governed by its own laws; and exercising most of the rights of a sovereign state. The general legislature was called the *States General*, composed of deputies from each province as many as it pleased. The right of war and peace, laying taxes, appointing and receiving ambassadors and naming the Secretary of State and all the staff officers was vested in this body. In deliberations each province had but one vote. The government was administered by the Stadholder. He was originally a kind of Dictator, appointed from the necessity of the times to conduct the emancipation of the state. When the necessity vanished, the office became of dubious authority, till William III. in 1672 procured it to be declared hereditary. He was captain general and high admiral president of the East and West India companies, and stadholder of each province. The second officer was the Grand Pensionary or Advocate of the republic.

Laws.] Justice is administered according to the local customs and statutes of each province and city, the ordinances of the states general, and in defect of all these the Roman code.

Population.] See table.

Army.] The Army in 1801 amounted to 22,384 men; viz. national troops 19,122, German troops 3,262. Now the young men of Holland are drafted for the French conscription, and considerable numbers of French troops are quartered on the inhabitants.

Navy.] The navy in 1806 consisted of

Ships of the Line	- - - - -	16
Frigates	- - - - -	10
Corvettes	- - - - -	6
Brigs	- - - - -	9
Cutters	- - - - -	5
Schooners	- - - - -	1

manned by 6000 seamen. The French government has built a number of ships since, in the navy yards of Holland. Formerly the Dutch navy was after the English the most powerful in Europe.

Revenue.] The revenue in 1808 amounted to 50,000,000 Dutch guilders. The expenditure was 74,119,354; and the debt, in 1807, 1,172,327,252 guilders.

Manners and Customs.] The towns, villages, and houses of the Dutch are distinguished for their neatness and cleanliness.—The villas of the opulent are thickly planted among the numerous canals. Their dress is extremely plain and little affect-

ed by fashion. It is wisely accommodated to the cold damp nature of their climate. Their chief food is herrings, in the curing of which they are unrivalled. Their butter and cheese also are excellent. The Dutch have always been noted for their cool phlegmatic temperament. Their courage is obstinacy; their industry heavy perseverance. All classes are distinguished for their frugality. The only ruling passion is avarice. This is universal, and regulates all their connections and all their intercourse.— Skating is the favorite amusement in winter, in which they are uncommonly alert; and the canals are crowded with all ranks, and of both sexes. The men are somewhat addicted to drinking, and both men and women to smoking tobacco. Both sexes are strong built, and both have the grossest shapes any where to be met with.

Language.] The Dutch language is a dialect of the German; and the Lord's Prayer runs in the following terms :

On se Vader die daer zijt in de Hemelen. Uwen Naem word gheheylicht. U Rijcke kome. Uwen Wille gheschiede op der Aerden, gelijck in den Hemel. Onse dagelijckt Broodt gheeft ons hedden. Ende vergheeft ous ouse Schulden ghelyck wy oock ouse Schuldenaren vergeven. Eude en leyt ons niet in Versoeckinge. Maer verlost ons vanden Boosen. Amen. Both English and French are spoken freely by people of fashion.

Literature.] The literature of the Seven United Provinces is more respectable than that of the other Netherlands. Not to mention the ancient chronicle of the church of Utrecht, and other ecclesiastical productions of the middle ages, the great Erasmus, the restorer of letters in Western Europe, was born at Rotterdam in 1467. Johannes Secundus, or Hans de Twede, one of the most elegant of modern Latin poets, was a native of the Hague, as the renowned Grotius was of Delft. Boerhaave, the celebrated physician, was born at Voorhoor near Leyden. Dort produced Paul Merula, a distinguished antiquary, who at the beginning of the seventeenth century first discriminated the real origins of European nations. Adrian Junius, or Yung, who explored the antiquities of his native country, was of Hoorn on the Zuyder Zee.— Among other eminent names may be mentioned Meursius of Lausden, Dousa of Leyden, Heinsius of Ghent, and the younger Vossius. Hoogeveen of Leyden died in 1794, after having acquired the reputation of being the first Greek scholar in Europe.— Haerlem disputes the invention of printing with the Germans, and the magistrates keep two copies of a book entitled *Speculum Salvationis*, printed by Koster in 1440. Many of the most elegant editions of the classics have come from the Dutch presses. The Dutch divines have excelled in controversial divinity.

Education, &c.] The mode of education pursued in these provinces seems to have been greatly inferior to that used in Scotland, a country enjoying an ecclesiastic government somewhat similar. The Dutch youths being chiefly allotted to a seafaring life, there was not indeed opportunity for numerous parochial schools, and consequent diffusion of common knowledge. The most celebrat-

ed Latin schools were at Rotterdam, Breda, Middleburg, Groningen, &c. The Universities are five; Leyden, Utrecht, Harderwyck, Franecker, and Groningen; with two inferior colleges at Amsterdam and Deventer. The Dissenters in England were accustomed to send their children to these Universities for education. There is an academy of sciences at Haarlem.

Cities and Towns.] Amsterdam in North Holland, the capital of the United Provinces, is situated on the river Amstel and an arm of the Zuyder Sea called the *Ye* or *Wye*, about 2 leagues from the mouth of the latter. In 1204 it consisted merely of a few huts for fishermen. In 1490 it was surrounded by a brick wall and strongly fortified. It is seated on a low marshy soil, and built on piles of wood. The haven is a mile and a half in length and about 1000 paces in breadth. It is not distinguished by natural advantages; but has been improved and secured by art. In 1796 the number of houses was 27,351, and of inhabitants 217,024. The houses are of brick or stone, and are universally neat and cleanly. The streets are generally narrow, but well paved.—There are 14 Calvinistic churches, 3 English, 1 or more Lutheran, Arminian and Anabaptist, several Catholic chapels, and 2 synagogues; one the largest in Europe. The chief edifices are the stadhouse built on 14,000 wooden piles, front 282 feet, depth 255, height to the roof 116; the Exchange; the Admiralty office; the Post Office; and St. Catherine's church. The canals are numerous, and have many stone bridges over them. They cross the city in every direction, and render the streets clean and pleasant. Rows of trees are planted on the brink, and their sides are lined with hewn stone. Amsterdam before the late troubles was surpassed in its commerce by no city in Europe but London.

The Hague, about half a league from the German Sea, was the seat of the general government as well as that of the Province of Holland. It was a mere village till William III. Comte of Holland, removed his court there from Gravesande in 1250. It stands in a dry soil somewhat elevated above the neighboring country; the air is pure, and the environs delightful. The number of houses, in 1796, was 6164; and of inhabitants 38,433. The houses are uncommonly good; the streets long, broad and cleanly; many of them being adorned with rows of trees. The most splendid edifices are the synagogue and several of the palaces and hospitals.

Rotterdam, also in Holland, at the confluence of the *Rotter*, with the Meuse, is first spoken of as a considerable town about 1270. Its shape is triangular, the houses handsomely built of brick, the streets wide and well paved. The haven is deep, easily accessible to the largest ships, and free from ice in the spring much sooner than the Texel. These advantages had given the town a very extensive commerce before the ruin of the country. The Bomb Quay is one of the finest in Europe. There are distinct walks for carriages and foot passengers, and shaded with double rows of trees. The city, in 1796, contained 6621 houses and 33,800 inhabitants. In the market place stands the well known statue of Erasmus.

Utrecht is the *Ultrajectum* of the Romans. They called it also *Antonina Civitas*, from Antoninus, a senator, who built it in the time of Nero; *Trajectum ad Rhenum* or the ferrying place over the Rhine; and *Trajectum Inferius*. It stands on a northern branch of the Rhine, which, before the great change in the bed of that river, was a principal channel. It is the capital of the province, and the seat of a very celebrated university. The shape of the town is oval. The principal streets are cut through with canals, two of which run the whole length of the city. The houses are brick, many of them stately. It contained in 1796, 32,294 inhabitants.

Leyden, the *Lugdunum Batavorum* of Ptolemy, is situated on the old northern branch of the Rhine, a few miles above the spot where it loses itself in the sands. The river divides the city into about fifty islands communicating with each other by 145 bridges, upwards of 100 of which are of freestone. The university has been celebrated for many years, but is now on the decline. Leyden contained in 1796, 3017 houses, and 30,955 inhabitants. It has eight gates. The land and gardens around are very productive, and there is a daily intercourse, by canals, with the other large cities and towns. The annual fair is still much frequented.

Groningen, the capital of the province of the same name, is in the northern part of Holland, about 10 miles from the sea.—The river Hunes runs through it to the ocean northward, and the Dunster runs eastward to the estuary of the Ems. Its port is very commodious, into which ships enter with great ease by means of the canal. The university was established in 1614. The town is strongly fortified, and adorned with many excellent buildings, public and private. It contained in 1796, 23,770 inhabitants.

Haerlem, or Harlem, in Holland, lies on the Sparen, about 3 miles from the Sea or Lake of Haerlem. It contains 4 Dutch Calvinist churches, 1 French Calvinist, 1 Lutheran, 1 Arminian, 4 Anabaptists, and several private Catholic chapels. Here are extensive manufactories of linen, ribbands and tape. The number of houses in 1796, was 7,963, and of inhabitants 21,360.

Dort, or Dordrecht, in Holland, lies on a small island in the Meuse, which was first detached from the main land by an irruption of the river in 1421. Its harbor is very commodious for trade. It contained in 1796 about 4000 houses and 18,014 inhabitants.

Middleburg, the chief town in Zealand and the capital of the island of Walcheren, was surrounded by a wall in 1132. The town house is a large magnificent building. The fortifications are strong and regular. The situation is extremely unhealthy. In 1796 it contained 17,687 inhabitants. In 1809 the town and the island were taken by the British, but were soon after abandoned.

Leuwarden, the capital of Friesland, is large, and well fortified. All the streets are straight, broad and handsome. Various canals connect it with the sea and with other parts of the province, by means of which it carries on a considerable trade. In 1796 it contained 15,525 inhabitants.

Nimeguen, in Guelderland, stands on the south side of the Wa-

hal, the southern branch of the Rhine. It is a very ancient city, has 13 gates, and is well fortified. In 1796 it contained 12,783 inhabitants.

Delft, in Holland, is situated on a large canal called the Schie, connected with the Meuse at Schiedam. The country is low, but pleasant. It contained in 1796 about 5000 houses, and 13,737 inhabitants. The city was formerly much celebrated for its beer, and for its *delft-ware*. Of the remaining towns, Herzogenbusch, in 1796, contained 12,627 inhabitants, Zwole 12,220, Gouda 11,715, Emden 11,128, Arnheim 10,080, Zaandam 10,012, Hoorn 9551, Schiedam 9111, Amersfoort 8584, Tilbury 8532, Alkmaar 8373, Breda 8250, Harlingen 7456, Zutphen 6878, Enkhuyzen 6803, and Zierikzee 6086.

Inland Navigation.] The canals of Holland are innumerable, and they serve the purpose of public roads. By those of Holland and the Netherlands a prodigious inland trade is carried on between those countries, and France and Germany. When frozen, the inhabitants travel on them with skaits; while heavy burdens are conveyed in sleighs. The profits which have accrued from them have been incalculable. They are generally 60 feet wide and 6 deep, and are kept well cleansed; the mud being very valuable as manure. They are generally level and need no locks.

Manufactures and Commerce.] The chief manufactures of Holland are linens, many of which however are made in Silesia; pottery, and painted tiles, especially at Delft; leather, wax, snuff, sugar, starch, paper, besides some of woollen, cotton, and silk.* But the most precious branch of commerce consisted in spices and drugs, brought from the settlements in the East Indies; and the Dutch East India company was, for a considerable time, the greatest mercantile firm in Europe. The fishery in the Northern Seas, and even on their own and the English coasts, was also an object of great commercial importance. Latterly perhaps the chief advantage was derived from Holland being the grand deposit of commerce between Great Britain and the continent, particularly Germany and France. The inland trade with Germany, by the canals and the Rhine, is almost the only branch which has escaped the ravages of war. Of this the most remarkable feature consists in the vast floats of timber, which arrive at Dort from Andernach, and other places on the Rhine, whose copious stream received the trees of the German forests. The length of these rafts is from 700 to 1000 feet, the breadth from 50 to 90; and 500 labourers direct the floating island, which is crowned with a village of timber huts for their reception. The navigation is conducted with the strictest regularity; and on their arrival at Dort the sale of one raft occupies several months, and frequently produces more than £30,000 sterling.† The other branches of inland traffic are numerous: and the Rhine may be said to supply Holland with insular advantages, secure from the destructive inroads of maritime war. At present the Dutch have no commerce on the ocean.

* Marshal, vol. i. 225—255.

† Radcliffe, ii. 114.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, BOTANY, ZOOLOGY, MINERALOGY, ISLANDS.

Climate and Seasons.] THE air of Holland is always moist and cold. Strangers complain of it as unhealthy; but the natives enjoy more than commonly firm and vigorous constitutions. The phlegm of the Dutch character is in a great measure attributable to their climate.

Face of the Country.] The coast is every where flat and sandy; and so low, that the inhabitants have been obliged to build dykes or mounds along a great part of it to prevent inundations from the ocean. They are usually 25 feet in height and 25 ells in thickness. The coast of the small province of Zealand alone, is dyked to the extent of 40 miles, at an original expense of £340,000 sterling. Holland, Friesland, Groningen, and East Friesland are similarly defended. The general face of the interior is that of a large marsh that has been drained. Much of the surface is below the level of the sea. The meadows are usually under water in the winter; but the inhabitants in the spring discharge this water into the canals and ditches by mills invented for the purpose. In the midst of these swamps and marshes, the eye is surprised and delighted to see numerous and important cities and towns rising in quick succession, and all the intervening country wearing the appearance of a continued flourishing village. Industry seems to have selected this most untoward spot as her favorite residence, and here the extent of her powers is most strikingly displayed. Yet the E. of Dutch Brabant is still disfigured by the large morass of Peal extending about 30 miles in length: Over-Yssel is almost wholly composed of marshes and heaths: and the morass of Bourtang rivals that of Peal in extent. The S. and S. E. parts of Friesland, Groningen and E. Friesland present extensive heaths; while the parts towards the sea rival the morasses of Holland. Thus the whole country may be said to display an intimate combination of land and water; and the few elevations commonly consist of barren sand.

Soil and Agriculture.] The agriculture of such provinces cannot be expected to be considerable, the land being mostly under pasturage, except a few crops of madder, and tobacco, which are cultivated with great predilection.* The pasturages in the north of Holland, especially those of Bemster, and in Friesland, supply such quantities of excellent butter, as to become a staple article of commerce. The cows seem to have been originally from Holstein, and the utmost attention is paid to warmth and cleanliness.

* Marshall, i. 264.

so that even in summer the animals appear in the meadows clothed with ludicrous care.*

Bays.] The Zuyder Zee is a great bay of the German Ocean, setting up from the N. into the United Provinces. It is so called from its situation towards the S. and is said formerly to have been a lake; an opinion which the great number of the shoals and islands at its mouth certainly countenances. It is of a winding irregular figure, and has a circuitous length of about 120 miles. It abounds in shoals and flats. Holland and the islands Texel, Vlieland, Scheling, and Amelandt separate it from the main ocean. The northern branch of the Rhine called the Issel falls into the S. E. part of this sea near Campen.

The common estuary of the Scheldt, the Meuse, and the two southern branches of the Rhine is a broad bay setting up from the W. between Holland and Dutch Flanders. The Dutch call it the *Zeeuwsche Stromen*, or Sea-Streams. Dollart Bay, between Groningen and E. Friesland, was formed by an inundation in 1277, which is said to have destroyed 33 villages. It receives the waters of the Ems.

Rivers.] The Rhine has three sources, all of which rise in the country of the Grisons. The northern rises from a glacier on the summit of mount Bedus or Bader. The *Middle Rhine* is the longest, and rises not far from mount St. Gothard. These united receive the southern which rises from mount Avicula at the head of a valley about nine leagues long, called the Rhinewald. These heights are upwards of 6000 feet above the level of the sea. The course is E. of N. to the southern corner of the lake of Constance, whence it bends west to Basil. It pervades or borders Switzerland for the space of 250 miles. From Basil it runs N. E. to Spire, and thence N. W. to the ocean. From its northern bend to its entrance into Holland it is the present boundary between Germany and France. Its principal tributaries are the Aar from Switzerland, the Neckar, the Mayn, the Lahn, and the Lippe from Germany, and the Moselle from France. As it enters Holland it divides at Schenkan Schans. The southern branch, the Wahal, *Vahalis*, pursues a south westerly course, mingles with the Meuse at the small island of Voorn, separates from it, and joins it again at Warcum. The united stream flows into the ocean, after passing the islands of Holland and Zealand. The northern branch, retaining the name of the Rhine, runs N. about 10 miles, and again divides near Arnheim. The right branch called the Issel, *Salla*, flows N. and falls into the Zuyder Zee at Campen. The left branch, still called the Rhine, runs westward to Wyck where it divides a third time. The larger branch, called the Lech, runs S. of W. and joins the Wahal and Meuse at Crimpe. The other called the *Old Rhine*, and anciently the chief arm of the river, runs N. W. by Utrecht, Woerden and Leyden, and loses itself in the sand a few miles from this latter city, and at a small distance from the German ocean. The whole length of the Rhine is about 800 miles.

The Meuse rises in France near the sources of the Seine, the Saone, and the Moselle. Its course is principally northerly, in France and the Netherlands; and W. in Holland.

The mouths of the Scheldt are in Holland.

The Ems also is now in part a Dutch river.

The Wechte rises in Germany and empties into the Zuyder a little north of the Issel at Gelmuyden.

Lakes.] The lakes are of small extent, if we except what is called the sea of Haarlem, on the N. of which is the Y, a broad piece of water passing through Amsterdam, rather wearing the semblance of a creek of the sea, than of a river. There are other small lakes in the N. of Holland, and in Friesland and in Groningen; not to mention some amidst the marshes of Over-Yssel.

Botany.] Few of the plants or trees of Holland are peculiar to it, or worthy of particular notice.

Zoology.] In the zoology of the United Provinces there is nothing peculiar, or worthy of remark; the horses are chiefly from England and Flanders, the oxen from Holstein. The stork is here frequent. The shores abound with excellent fish, particularly turbot and soals.

Mineralogy.] Minerals are unknown, if we accept the slight incisions for peat; which the Dutch not only procure from the morasses, but also from the bottoms of the river, by dragging up the mud, which is exposed to dry on the shore, then cut into small pieces, and again dried for use. No mineral waters are here known; and there are few uncommon appearances of nature, though the whole country may be deemed an artificial curiosity, from the number of canals, and from the vast dykes erected to exclude the sea.

Islands.] Cadsand, near the coast of Dutch Flanders, commands the entrance of the West Scheldt. It is fertile in corn; the meadows are luxuriant; and the farmers make excellent cheese. Cassandria is the principal place. Walcheren, the most westerly of the isles in the province of Zealand, is 13 miles from N. to S. and 8 from E. to W. Flushing, or *Vliessengen*, the next town after Middleburg, is the key of the Scheldt and contained in 1796, 5691 inhabitants.

South Beveland is about 20 miles long and 7 wide. The chief town Goes is well fortified, and contains 3700 inhabitants. North Beveland is 6 miles long, and 4 broad.

Tolen is 10 miles long, and 4 broad. Tolen, the capital, is a handsome town, and strongly fortified.

Schouwen, N. E. of Walcheren, is 14 miles long and 5 broad. Ziriczee, the capital, is one of the oldest towns, and was built and walled in 859. In 1796 it contained 1800 houses and 6086 inhabitants. St. Philip's Land and Duyvelland lie east of Schouwen.

Ovarflakee is in the province of Holland. Sommerdyk is the capital.

Goeree is 10 miles in circumference.

Voorn is 20 miles long and 5 broad. Briel, the capital, is on the N. side, has a good harbor, 970 houses, and 3170 inhabitants.

Here admiral Tromp was born. Helveltsluy, on the S. side of the island, has a noble harbor, and is the general port for packets from England.

Beyerlandt lies between Voorn and Dort. Stryen is the capital. Isselmond is a long narrow island opposite Rotterdam.

The Texel, at the mouth of the Zuyder, a part of Holland, is 15 miles long, and 6 broad. The town of the same name has an excellent harbor, and a fort which commands the entrance. The land is fertile and well secured with dykes.

Vlieland, 8 miles long and 3 wide, is 5 miles from the Texel.

Schelling is a narrow sand bank, 15 miles long and 3 wide.

Amelandt, a part of Friesland, is 12 miles long and 3 wide. Little islands are scattered eastward along the whole coast of Groningen and East Friesland.



NETHERLANDS.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, DIVISIONS, ORIGINAL POPULATION, HISTORICAL EPOCHS, RELIGION, GOVERNMENT, POPULATION, MANNERS AND CUSTOMS, LANGUAGE, UNIVERSITIES, ARTS, TOWNS, EDIFICES, INLAND NAVIGATION, MANUFACTURES AND COMMERCE.

OUR account of this country must be very brief, as it will be included under the next article.

Names.] This territory was a part of *Gallia Belgica*; and the chief tribes were the *Menapii*, the *Tungri*, the *Nervi*, and the *Morini*. After the irruption of the Franks it formed a part of *Neustria*, or the new kingdom; the ancient kingdom of the Franks being on the E. of the Rhine. In the middle of the 9th century arose the powerful house of the Earls of Flanders; and the Counts of Hainaut commence about the same period. The Dukes of Lower Lorrain and Brabant are little known before the end of the 10th.—In the 15th, most of the country was subjected to the Dukes of Burgundy. The title of Austria to the Netherlands came through the heiress of the latter house. The inhabitants of Flanders are called *Flemings*, and this name is sometimes applied to all the Netherlands.

Extent.] The length of the Netherlands, from Dunkirk to the frontiers of Treves, is about 200 miles, and the breadth is about 120. They contain 17,500 square miles.

Boundaries.] Bounded N. by Holland; E. by Germany; S. and S. W. by France; W. by the German ocean.

Divisions.] This territory, before the French Revolution, comprised 10 provinces; and belonged to Austria, the French, and the Dutch.

1. PROVINCE OF BRABANT.

Subdivisions.	Chief Towns.	
1. Dutch Brabant	Boisleduc Breda Bergen-op-Zoom Grave, N. E. Lillo Steenburgen	} N. } N. W.
2. Austrian Brabant	Brussels, E. lon. 4 6, N. lat. 50 50 Louvain Vilvorden Landen	in the middle.

2. ANTWERP; AND 3. MALINES,

Are provinces independent of Brabant, though surrounded by it, and before the late revolution subject to the House of Austria.

4. PROVINCE OF LIMBURG, S. E.

Chief Towns	Limburg, E. lon. 6 5, N. lat. 50 37, Austrian. Maestricht Dalem Fauquemont or Valkenburg	} Dutch.
-------------	--	----------

5. PROVINCE OF LUXEMBURG.

Subdivisions.	Chief Towns.
Austrian Luxemburg.	Luxemburg, E. lon. 6 8, N. lat. 49 45.
French Luxemburg.	{ Thionville Montmedy } S. E.

6. PROVINCE OF NAMUR,
In the middle, formerly subject to Austria.

Chief Towns.	Namur, on the Sambre and Maese, E. lon. 4 50, N. lat. 50 30. Charleroy on the Sambre.
--------------	---

7. PROVINCE OF HAINAUT.

Subdivisions.	Chief Towns.
Austrian Hainault.	{ Mons, E. lon. 3 53, N. lat. 50 30 } in the { Aeth Enguen } middle
French Hainault.	{ Valenciennes Bouchain Conde } S. W. { Landrecy }

8. PROVINCE OF CAMBRESIS.

Subject to France.	Cambray, E. of Arras, E. long. 3 15, N. lat. 50 15. Crevecour, S. of Cambray.
--------------------	---

9. PROVINCE OF ARTOIS.

Subject to France.

Arras, S. W. on the Scarpe, E. lon. 2 5, N. lat. 51 20. St. Omer, E. of Bologne. Aire, S. of St. Omer. St. Venant, E. of Aire. Bethune, S. E. of Aire. Terouen, S. of St. Omer.

10. PROVINCE OF FLANDERS.

Subdivisions.

Dutch Flanders.

Austrian Flanders.

French Flanders.

Chief Towns.

Sluys, N. Axel, N. Hulst, N. Sas van Ghent, N. Ghent on the Scheldt, E. lon. 3 36, N. lat. 51. Bruges } Ostend } Newport } N. W. near the sea. Oudenard, on the Scheldt. Coutray } Dixmude } On the Lis. Ypres, N. of Lisle. Tournay, on the Scheldt. Menin, on the Lis. Lisle, W. of Tournay. Dunkirk, on the coast E. of Calais. Douay, W. of Arras. Mardike, W. of Dunkirk. St. Amand, N. of Valenciennes. Gravelin, E. of Calais.

The Netherlands now constitute numerous departments of the French empire.

Original Population.] The *Celts* were the first inhabitants.—They were driven out by the *Belgæ*, a Gothic colony ; and they by a kindred nation, the *Franks*.

Historical Epochs.] 1. The occupation of the country by the Celts, and then by the Belgæ.

2. The partial conquest by the Romans.

3. The conquest by the Franks.

4. The state of the country under the earls of Flanders and Hainaut.

5. The power of the dukes of Burgundy. During these two epochs, the Netherlands became the great mart of commerce for the west of Europe.

6. The acquisition of the country by Maximilian of Austria, towards the end of the 15th century. After the liberty of Holland had been secured by the treaty of Utrecht, in 1579, the commerce and wealth of the Netherlands passed quickly to their northern neighbors.

7. The conquest by France, and annexation to its territories.

Religion.] The established religion was the Catholic, but Protestants were unmolested. There was one archbishopric at Malines, and 9 or 10 bishoprics.

Government.] The Austrian Provinces were governed by a Regent. Each had its own governor also, and an assembly consisting of the clergy, nobility and deputies of the towns. There was likewise a general assembly of the provinces which met at Brussels. Notwithstanding this shadow of liberty, the Austrian Court had absolute power.

Population.] According to the Imperial Almanac of 1808, the population of the Netherlands amounts to 4,140,255; of which 1,410,670 belong to what were formerly called French Netherlands; and 2,729,585 to the Austrian and Dutch Netherlands. This is a population for the whole country of 236 to the square mile.

Manners and Customs.] The Flemings on the frontiers of Holland dress like the Dutch boors, and are scarcely distinguishable from them in character or appearance. The inhabitants of French Flanders, on the contrary, have much of the French vivacity, and dress like their southern neighbors.

Language.] The Flemish is an intermediate dialect, between the German and the Dutch. The better sort of people speak the French. The language of the common people on the borders of France is Flemish and French intermixed, and is called the Walloon.

Universities.] These were at Louvain, Tournay, Douay, and St. Omer. The first was founded in 1426, had great privileges, and was long highly celebrated.

Arts.] The Flemish painters and sculptors have great merit, and form a school by themselves. The works of Rubens and Vandyke cannot be forgotten. The Flemings formerly engrossed tapestry weaving to themselves. They have invented various valuable manufactures.

Cities and Towns.] Brussels, in Austrian Brabant, was built in the latter part of the 9th century. It stands partly on a hill, and partly in a valley, on the banks of the Senne, a branch of the Scheldt, and is said to be seven miles in circumference. The chief edifices are the church of St. Gudule, the palace, the guild-hall, and the hotel de ville. There is a park, a green walk on the canal 2 miles in length, 7 market places, and 20 public fountains adorned with statues. Its camlet and tapestry were formerly in high estimation, and its lace and its carpets are known all over the world. It contained, in 1802, 66,297 inhabitants. Before the revolution, Brussels was the capital of the Austrian Netherlands.

Antwerp is built in a large plain, on the east bank of the Scheldt; which is deep enough to admit vessels of great burthen close to the quays; and by means of the canals vessels may be brought to unload at the very doors. It is surrounded by a wall and regular fortifications. The streets are generally wide and

straight. The chief edifices are the cathedral, the stadhouse, and the exchange. Its population, in 1803, was 56,318 souls.—About two centuries and a half ago Antwerp was the most commercial city in the world. In 1543, it contained, according to Guicciardini, 100,000 inhabitants. When the Dutch revolted from Spain, they destroyed the commerce of this city, by sinking obstructions in the channel of the river.

Ghent, in Austrian Flanders, anciently *Wanda*, was the chief city of the *Nervii*. It is built at the conflux of the Scheldt, the Lys, and the Lieve; and was in the time of Charles V. a large, strong, and splendid city. It has cloth, linen, and silk manufactures, and its trade is greatly facilitated by several excellent canals. It contained, in 1802, 55,161 inhabitants. Charles V. was born here.

Lisle, in French Flanders, was built in 640. It stands in a rich marshy plain on the Deule, and was fortified by Vauban. Its citadel is thought the strongest in Europe, except that of Turin. The inhabitants carry on a variety of manufactures, and in 1802, amounted to 54,756.

Bruges, in Austrian Flanders, is built at a small distance from the German Ocean, and has communication, by means of canals, with Dunkirk, Ostend, Nieuport, Sluys, and Ghent. In the 13th and 14th centuries, it was the greatest emporium in Europe. It is still a place of considerable trade, and has manufactories of baize and linens. In 1808, it contained 33,632 inhabitants.

Tournay, *Turnacum*, in Austrian Flanders, the most ancient town of the Netherlands, and a city of the *Nervii*, is said to have been built 600 years before our Saviour. It stands upon the Scheldt, near the frontier of these provinces. It contained, in 1802, 3800 houses, and 21,349 inhabitants.

Dunkirk, in French Flanders, or *the church on the downs*, is a large maritime town with one of the best harbours on the coast. The strength of its fortifications and the fact that it is the key of the Netherlands, have rendered it the object of perpetual contention among the various powers of Europe. Few towns have had so many masters, or suffered so often or so much from sieges and bombardments. In 1636 it contained 1639 houses, and 14,374 inhabitants; and in 1802, 1800 houses, and 21,158 inhabitants. The chief manufactures are those of tobacco, starch, glass and leather, beside several ropewalks, distilleries and sugar-houses.

St. Omer, in Artois, is built on the Aa, and strongly fortified. In 1802, it contained 20,109 inhabitants.

Arras, *Nemetacum*, on the Scarp, was the capital of Artois. The fortifications were by Vauban. Houses, in 1802, 3768; inhabitants, 19,958.

Douay, *Duacum*, is built in a fertile country on the Scarp, and is well fortified. Here are manufactures of earthen-ware, glass bottles, soap, oil, tin, linen, cambric, cambric muslin, thread, and thread lace. It contained, in 1802, 2737 houses, and 18,230 inhabitants.

Mons, in Austrian Hainaut, on a branch of the Scheldt, is said

to have been a town of some standing in the time of Cæsar. The streets are broad, and the public buildings rich and elegant. In 1802, it had 4600 houses, and 18,291 inhabitants.

Maestricht, in Brabant, on the Meuse, with a small territory around it, belonged to the Dutch. It is one of the strongest places in Europe. It contained, in 1802, 17,963 inhabitants.

Valenciennes, at the head of navigation on the Scheldt, in French Hainaut, is said to have been built by the emperor Valentinian, A. D. 367. The fortifications are regular and strong. The streets are generally narrow, dark, and crooked. In 1802, the town contained 2500 houses, and 16,918 inhabitants. Its municipal laws have been celebrated for their wisdom, and were the models of those of Venice and Nuremburg.

Malines, or Mechlin, on the Dyle, a tributary of the Scheldt, was the only archbishopric of the Netherlands. Here are manufactures of bed-quilts, thread, and lace. These last are celebrated. Here is also an extensive cannon foundery. In 1802, the inhabitants were 16,072.

Ypres, or Ipres, in Austrian Flanders, has extensive manufactures of cloth and serge. It stands on the Ypre, and contained, in 1802, 15,148 inhabitants.

Namur, in a valley at the conflux of the Meuse and the Sambre, is thought not to be surpassed in the strength of its fortifications, by any place in Europe. The motto over one of its gates is “*Reddi non vinci potest.*” Inhabitants in 1802, 15,085.

Cambray, Camaracum, in Cambresis, on the Scheldt, near its source, is fortified by a strong citadel and a fort. It has twelve churches, three abbeys, two convents, and two hospitals. Its principal manufactures are lace, linen cambric, soap and leather. Inhabitants in 1802, 13,830.

Courtrai, or Cortrick, in Austrian Flanders, stands upon the Lys, and is celebrated for its manufacture of table linen. It has suffered severely in the wars in the Netherlands. Inhabitants, in 1802, 13,572.

Ostend, in Austrian Flanders, is built on an excellent harbor, on the German Ocean. It is one of the keys of the Netherlands, and rivals even Dunkirk, Namur and Maestricht in the strength of its fortifications. At the beginning of the 17th century, it endured a siege of more than three years, and was not surrendered till 80,000 Spaniards had fallen before it. Its population, in 1802, amounted only to 10,459.

Luxemburg, *Augusta Romanorum*, lies on the Alsitz, a branch of the Moselle, and had 9002 inhabitants in 1802.

Edifices.] Even at the present day, every traveller is impressed with surprise, not only at the number, but the great extent of the Flemish cities, towns, and even villages; in which respect the Netherlands exceed every country in Europe, except the United Provinces. The chief edifices are the cathedrals, churches and monasteries; though a few castles belonging to ancient families or rich merchants, used to attract some notice; the taste of the latter buildings being faithfully copied in the Flemish landscapes,

and more remarkable for peaked roofs, fantastic ornaments, the muddy moat, and draw-bridge, than for grandeur of design, or beauty of situation.

Inland Navigation.] Idle would be the attempt even to enumerate the canals which intersect these provinces in all directions. Some of them date even from the tenth century, and the canal from Brussels to the Scheldt is of the sixteenth. Other important canals extend from Ghent, Antwerp, Ostend, and other cities and towns, especially in the western districts ; but, under the Austrian domination, these important means of intercourse were shamefully neglected.

Manufactures and Commerce.] The manufactures and commerce of the Netherlands, for a long period superior to any in the west of Europe, have suffered a radical and total decline, owing partly to the other powers entering into competition, and partly to the establishment of freedom in the United Provinces, whence Amsterdam arose upon the ruins of Antwerp. What little commerce remains is chiefly inland to Germany, the external employing very few native vessels. The East India Company established at Ostend was suppressed by the jealousy of England and other powers ; and the chief commerce was afterwards carried on by the English established in that city. Yet of the manufactures a few fragments remain : Cambray, is still renowned for the cambrics which thence derived their name ; as Tournay, or Dornick was anciently famous for the finest linens. At Bruges there are still some manufactures of broad says, baize and other woolens ; considerable fabrics of broadcloth, druggets, shalloons, and stockings, were conducted at St. Omer, chiefly with wool smuggled from England.* But the chief manufactures are of fine linen, and laces, at Mechlin, Brussels, Ghent, Antwerp, and Louvain, which still enrich the country around, and induce the farmers to cultivate flax, even on the poorest soils.† The Netherlands produce, for home consumption, abundance of corn and vegetables ; and the coal mines would become important, if the operations were skilfully conducted. There is besides abundance of turf for fuel ; with iron, porcelain clay, and other commodities.

CHAPTER II.

NATURAL GEOGRAPHY.

CIMATE, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, FORESTS, MINERALOGY.

Climate.] THE climate is equally moist, but less cold than that of Holland. It considerably resembles that of the south of England, though the seasons are more regular. The vine is cultivated with success in Luxemburg.

Face of the Country.] Flanders is one uniform level, in which the rivers and the canals are scarcely distinguishable. Farther

* Marshall, ii. 11.

† Ibid. 63.

east the country is pleasantly diversified with hills and vallies, meadows, fields, and forests.

Soil and Agriculture.] The soil is in general a rich sandy loam, sometimes interspersed with fields of clay, but oftener with large tracts of sand. The agriculture of the Netherlands has been celebrated for 600 years, ever since their commerce and manufactures were extensive. They were long considered the garden of Europe; a praise which they still share with England and Lombardy. Flax is a great source of riches to the country. The butter and cheese equal those of Holland.

Rivers.] The Scheldt, the ancient *Scaldis*, rises in France, about 8 miles N. of St. Quintin, and runs N. E. to Antwerp 7 and thence, N. W. to the German Ocean. About 15 miles below Antwerp, it divides into numerous branches, which encompass the islands of Zealand. These branches are called by the Dutch *Zeeuwsche Stromen*, or *sea streams*, being chiefly arms of the sea. The length of this river is about 150 miles.

The Lys rises in France, near Lysburg, and runs N. E. to the Scheldt, which it joins at Ghent.

The Dender falls into the same river at Dendermonde.

The Dyle rises a little N. W. of Namur, and unites with the Scheldt at Niel, after receiving the Derme, the Senne, and the Nette.

The Meuse has been described.

The Sambre rises near Nouvion, and runs N. E. to Namur, where it falls into the Meuse.

The Moselle, *Mosella*, rises in the mountains of the Vosges, runs through Luxemburg, and falls into the Rhine at Coblenz.

Forests.] That of Soigne is in Brabant. Further to the east and south, are immense forests, which almost pervade Hainaut and Luxemburg, from Valenciennes to Treves, forming striking remains of the ancient forest of Ardenne.

Mineralogy. Coal is found in several districts. Lead and copper are found in Namur; in Hainaut iron and slate; and Luxemburg derives its chief wealth from its iron works. Marble and alabaster are also found in the eastern districts.

FRENCH EMPIRE.

249

FRENCH EMPIRE.

I. FRANCE. 244,270 square miles ; 36,350,987 inhabitants.

1. NORTH EAST FRANCE, 70,790 square miles ; 13,910,727 inhabitants.

Former Names.	Departments.	Population.	Inhabitants.
West part of Austrian Flanders,*	Lys	465,121	33,632
East part of do. and Dutch Flanders,*	Escaut	629,964	55,161
French Flanders,* French Hainaut,* and Cam-	Nord	839,833	54,756
bresis,*		570,836	19,958
Artois,*	Pas de Calais*	443,059	18,291
Austrian Hainaut,*	Jemmappe	431,959	66,297
South part of Austrian Brabant,*	Dyle	249,376	56,318
N. part of do.* Antwerp,* and Malines,*	Deux Nethes	225,549	
Part of Luxembourg,*	Valdore	180,655	15,085
Namur,* and part of Luxembourg,*	Sambre and Meuse	267,249	17,963
Part of Gelderland,† and of Liege,†	Meuse Inferieure		
Lemburg,* and part of Liege,† with Stavel, ^t	Ourthe	313,876	
and Malmedy,		248,814	10,691
Part of Treves, ^t	Rhine and Moselle	259,522	9,118
Part of Treves, ^t and of Deux Ponts, ^t *	Sarre	342,316	21,583
Part of Deux Ponts, ^t and of Menizz, ^t	Mont Tonnere	616,287	42,706
Part of Cologne, ^t of Juliers, ^t of Prussian Guel-	Roer		
derland, ^t of Cleves, ^t Moeurs, ^t &c.		465,064	41,279
Picardie,			

* Part of the Netherlands before the revolution.

† Part of Germany.

FRENCH EMPIRE.

Former Names.	Departments.		Inhabitants.
	Population.	Chief Towns.	
Isle de France,	631,531	PARIS	547,756
{ Seine	429,523	Versailles	27,574
Seine and Oise	369,086	Beauvais	12,392
Oise	438,643	Laon	6,091
Aisne	298,815	Melun	6,111
Seine and Marne	310,493	Rheims	50,225
Marne	254,000	Ledan	10,544
Ardennes	240,661	Troyes	24,061
Aube	237,785	Chaumont	6,158
Haute Marne	284,703	Barsur Ornan	
Meuse	371,937	Metz	32,099
Moselle	342,187	Nancy	28,227
Meurthe	334,169	Epinal	7,321
Vosges	404,018	Colmar	11,933
Haut Rhin	488,350	Strasbourg	49,056
Bas Rhin	339,278	Auxerre	12,047
Yonne	347,842	Dijon	18,888
Cote d'Or	447,565	Magon	10,807
Saone and Loire	294,936	Vesoul	5,417
Haute Saone	227,075	Besançon	28,436
Doubs	286,640	Lons le Saunier	6,041
Jura			
2. NORTH WEST FRANCE, 73,740 square miles; 9,833,090 inhabitants.			
Normandy,	642,773	Rouen	84,223
Seine Inferieure	480,317	Caen	30,923
Calvados	566,826	Coutances	8,507
Manche	425,920	Alençon	12,407
Orne	415,574	Evreux	8,426

FRENCH EMPIRE.

251

Former Names,	Inhabitants.	Chief Towns.
Bretagne,	501,528	Rennes St. Brieux
Cotes du Nord (Isle de Belleisle)	510,456	Brest Vannes Nantes Le Mans Laval Angers Tours
Finisterre	474,349	393,368
Morbihan	368,506	330,233
Loire Inferieure	410,380	376,113
Sarthe	272,730	289,728
Mayenne	259,967	213,482
Mayenne and Loire	209,911	218,297
Indre and Loire	241,739	240,271
Loiret	209,911	270,271
Eure and Loire	213,482	Chateaurox
Loire and Cher	213,482	Bourges
Indre	213,482	Nevers
Cher	213,482	Fontenay
Nievre	213,482	
Vendée	213,482	
(Isle de Normontière) (Isle de Jeu)	213,482	
Anjou, Touraine,	242,658	Niort
Orleanois,	250,807	Poitiers
Berry,	244,735	Limoge
Nivernois,	226,224	Guéret
Poitou,	321,477	Angoulème
Marche and part of Limosin,	402,105	Saintes
Saintonge and Angoumois, (Isle d'Oleron) (Isle Rhei)	15,028	
	18,223	
	20,255	
	3,125	
	14,800	
	10,162	

FRENCH EMPIRE.

Former Names, Bourbonnois,	Departments.	Population. 272,616	Chief Towns. Moulins	Inhabitants. 13,509
3. SOUTH WEST. FRANCE, 61,135 square miles; 7,279,891 inhabitants.				
Guyenne and Gascoigne,	{ Dordogne Gironde Lot and Garonne Lot	{ 410,350 519,685 352,832 389,725	{ Perigueux Bordeaux Agen Canors Rhodez	{ 5,733 90,992 10,569 11,228
	Aveiron Gers Landes	{ 291,845 236,039 206,680	{ Auch Mont de Marsin Tarbe	{ 6,233 2,866 6,777
	Hautes Pyrénées Basses Pyrénées	{ 383,502 191,693	{ Pau Tarascon Perpignan Toulouse	{ 8,465 9,069
Bearn and Comté de Foix, Roussillon,	{ Arriège Pyrénées Orientales	{ 126,626 430,317	{ Carcassone Castres Nismes Mende	{ 9,695 50,171 15,219 5,014
	{ Haute Garonne Aude Tarn Garde	{ 226,198 272,163 322,144	{ Lozère Ardèche Haute Loire Hérault	{ 15,171 39,594 2,023 12,069
Languedoc,		{ 155,936 290,833	{ Le Puys Montpellier	{ 32,723
		{ 261,512 301,099	{ Lyons Privas	{ 88,919
Lyonnais, Forêt, and Beaujolais,				{ Montbrison
Auvergne,				{ Clermont
Part of Limosin,				{ Aurillac Tulle
				{ 4,703 30,000 10,357 9,362

4. SOUTH EAST FRANCE, 38,705 square miles; 5,327,279 inhabitants.

Former Names.	Departments.	Population.	Inhabitants.
	Chief Towns.		
Provence,	Bouches du Rhone Basses Alpes Var	320,072 145,777 283,260	96,413 2,872 29,760
Avignon,† and Venaissin,†	Vaucluse Hautes Alpes Drôme Isère	190,180 120,100 242,217 446,208	21,812 8,050 7,532 20,654
Dauphiné,	Ain Leman Alpes Maritimes Mont Blanc Montenotte Stura Po Doria Sesia	297,470 215,844 128,814 296,366 290,000 426,496 393,208 224,127 202,822 314,523 399,296 196,014 112,348 87,097 (13,750)	6,984 23,309 18,475 10,425 21,557 18,752 73,716 7,020 16,162 32,225 80,156 8,000 11,336 6,576 (3000)
Part of Bourgogne, Geneva,† part of Gex, Larouge, Thonon, &c. County of Nice,† Savoy,†			
Piedmont,	Marengo Genoa Appennines Golo Liamone (Isle d'Elba)		
Montserrat,†			
Republic of Genoa,†			
Corsica,†			

N. B. The provinces not marked were a part of Old France.

† Belonging to Italy before the revolution.

The annexation of what was lately the kingdom of Holland, during the present year, has added to what is called France 12,662 square miles, and 2,001,416 inhabitants.

	Square Miles.	Inhabitants.
II. DEPENDENCIES.		
I. In Italy and the Mediterranean,	26,542	2,978,000
1. Etruria	11,650	1,725,000
1. The territory of Florence	7,715	1,100,000
2. The territory of Pisa		
3. The territory of Siena		
The islands Gorgona, Giglio, and Gianuti		
2. Parma and Piacenza	1896	240,000
1. Duchy of Parma		
2. Duchy of Piacenza		
3. Ionian Islands	965	187,000
1. Corfu		
2. Paxo with Antepaxo		
3. Santa Maura		
4. Cefalonia		
5. Theaki		
6. Zante		
7. Cerigo		
4. Lucca and Piombino	1,074	172,000
1. Lucca		
2. Piombino		
3. Massa, Carrara and Garfagnana		
5. Principality of Beneventum	175	20,000
6. Principality of Ponte Corvo	44	6,000
II. In Switzerland,		
7. Principality of Neufchatel	362	47,000
1. County of Neufchatel		
2. County of Vallengin		
III. In Germany,	14,530	1,206,000
1. Hanoverian States		629,000
1. Calenburg		
2. Luneburg		
3. Lauenburg		
4. Hadeln		
5. Duchy of Bremen		
6. Verden		
7. Hoya		
8. Diepholx		
2. Swedish Pomerania		116,000
3. Erfurt with Blankenhayn		51,000
4. Bayreuth		335,000
5. Fulda		91,000
6. Hanau		66,000
7. Lower Catzenebolgen		18,000

FRANCE.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, BOUNDARIES, EXTENT, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, ANTIQUITIES, RELIGION, GOVERNMENT, POPULATION, COLONIES, ARMY, FORTIFICATIONS, NAVY, REVENUE, POLITICAL IMPORTANCE AND RELATIONS, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, CITIES AND TOWNS, SEAPORTS, EDIFICES, ROADS, INLAND NAVIGATION AND CANALS, MANUFACTURES AND COMMERCE.

Names.] THAT the Phenicians occasionally visited France in their voyages to Spain and England is highly probable; but we know of no name which the country then bore, except that which it received in common with the rest of Europe, from the early Asiatics. The aborigines styled themselves *Celtae*. The Greeks called the country *Galatia*, and the inhabitants *Galatae*. Timaeus Siculus asserts that a colony of Ionians, sailing from Phocea, founded Marseilles, 120 years before the battle of Salamis; corresponding with 600 before the christian era. About 480 years afterwards the Romans explored the S. E. parts of France, and soon founded the province called *Gallia Braccata*. They gave the name of *Gallia* to the whole country, though the name *Galli* was, in the time of Cæsar, especially appropriated to the *Celtæ*. The tribes in the north were then called *Belgae*; those in the south *Aquitani*. The name *Armorica*,* signifying *maritime*, was likewise given to the territory of the *Celtæ*. The country was called *Francia* or *France* after it was taken possession of by the *Franks*.

Boundaries.] What was France before the revolution was bounded W. by the Bay of Biscay; N. W. by the English channel; N. E. by the Netherlands; E. by Germany, Switzerland and Italy; S. E. by the Mediterranean; and S. W. by Spain. The subsequent annexation of Holland and the Netherlands makes the Bay of Biscay, the English channel, and the German ocean, the western boundary; and the German ocean the northern. The additions in the S. E. have still left Italy a part of the eastern boundary.

Extent.] The length of France, in 1790, from Calais to the Pyrenees, was 620 miles; and its greatest breadth from Cape St. Mahe to the Rhine, 560. It extended from 42° 10' to 51° N.; and from 4° 40' W. to 7° 30' E. Its contents were, according to Herbin and Chanlaire, as quoted by Hassel, exclusive of the islands

* *Armorica* especially denoted the country between the Seine and the Loire; though, in the time of Cæsar, it was given to the whole northern and western coast. Between these two rivers, and in various other parts of the country, the Celtic tongue continued the vernacular tongue. This dialect of it was called the *Armoric*.

Corsica and Elba, 187,385 square miles, or 119,926,400 acres. Templeman estimated them at 186,282 square miles, or 119,220,874 acres; while Neckar made them 205,816 square miles, or 131,722,295 acres. Pinkerton's estimate, at 148,840 square miles, is doubtless far short of the truth. The table, which is taken from Hassel, states the extent of France in 1809, when the Netherlands, all of Germany west of the Rhine, the little territory of Geneva, and the western part of Italy had been added. The contents, as there stated, are 244,270 square miles; of which 4,135 are contained in the islands Corsica and Elba; and 17,500 were added from the Netherlands; 12,720 from Germany, and 22,530 from Italy, including the territory of Geneva, containing about 60 square miles. If to this sum we add the square miles in Holland, we shall have a grand total of 256,932.* The present length of France, from the Pyrenees to the north coast of Holland is 790 miles.

Original Population. The *Celts* were the first inhabitants of Gaul; and, for a long period, they appear to have occupied the whole country without disturbance. The *Ionian* colony has been mentioned. Before the time of Cæsar, the *Belgae*, a Gothic nation, had crossed the Rhine; and, in his first campaign, he found them possessed of the territory N. and E. of the Marne and the Seine. The *Aquitani*, also, probably of African origin, had advanced from Spain, and driven the Celts before them as far as the *Garonne*. In the 4th century a Celtic colony from Britain, in consequence of the Saxon invasion, settled in Armorica. In the 5th, the *Franks* or *Freemen*; an assemblage of Gothic tribes from the district between the Weser, the Rhine, and the ocean; overspread the country, and became the governing nation. Early in the 10th, the *Normen*, from Scandinavia, seized upon Normandy. Their descendants are now possessed of that province.

Progressive Geography.] The Romans appear at first for a long time to have had very confused notions of the situation and extent of Gaul. The name *Gallia* was first given to all that part of Italy, which lies north of *Ancona*, on the Adriatic, in lat. 43° 37'. After the conquest of this region the Roman arms advanced westward; and, about the year 120 B. C. reduced the S. E. part of France. The country, before called *Gallia* simply, now received the name of *Gallia Cisalpina*: while, on an indefinite extent west of the maritime Alps, was bestowed the name of *Gallia Transalpina*; and, on that part of it which they had just subdued, the name of *Provincia Romana*, including the late provinces of Languedoc, Provence, Dauphiné, and Savoy. The state of the country in the time of Julius Cæsar has been mentioned. *Transalpine Gaul* was then considered as comprehending Switzerland, and all the country between the ocean, the Pyrenees, the Mediterranean, the

* The minister of the Interior, in his Exposition of the state of the French empire presented to the Legislative body, June, 1811—says, “Since your last session, the empire has received an addition of 16 departments, 5,000,000 of people, a territory yielding a revenue of 100,000,000 of livres, an hundred leagues of coast, with all their maritime means.”

Alps, and the Rhine. Augustus gave the name of *Gallia Narbonensis* to the Provincia ; and divided the rest of Transalpine Gaul into *Aquitania*, between the Pyrenees and the Loire ; *Gallia Celtica*, between the Alps, the Loire and the Seine ; and *Gallia Belgica*, north of the Seine, and also including Switzerland.* In the new arrangement of the empire, made by Constantine, Transalpine Gaul was divided into 17 provinces. At its final subversion, the Armorici, deserted by the Romans, formed themselves into a commonwealth, to resist Clovis, king of the Franks. This they did with success ; but soon after were amicably received into the number of his subjects. At the same time the Burgundians, whose kingdom lay along the Rhine and the Rhone, maintained their independence, and were not reduced into the form of a province, till the year 534.

Historical Epochs.] 1. The possession of the country by the *Celtæ*, the *Belgæ*, and the *Aquitani*.

2. The conquest by Cæsar, in the year 54 B. C. and the subsequent dominion of the Romans.

3. The establishment of the Merovingian line of kings in 448, and the complete overthrow of the Roman power by Clovis, grandson of Merovaeus, in 487. Nine years afterwards the Franks, with Clovis, were converted to Christianity.

4. The elevation of Pepin, the head of the Carlovingian race, in 751 ; followed 20 years afterwards, by the celebrated reign of Charlemagne ; who subdued that part of Spain which lies north of the Ebro, Italy north of Calabria, the whole of Germany, and a part of Hungary. He was the founder of the German empire, and was crowned in the year 800.

5. The accession of the House of Capet, in 987, which, till then, had borne the title of Counts of Paris.

6. The Crusades, in which the French acted a conspicuous part, in the 13th century.

7. The wars of the English in France, and the temporary conquest of the country by Henry V. in 1421. These wars continued from 1337, to 1450.

8. The accession of the House of Valois, a collateral branch of the House of Capet, in 1328.

9. The reign of Louis XI. beginning 1461. He rendered the monarchy absolute.

10. The civil wars with the Protestants, and the massacre of St. Bartholemey in 1572.

11. The accession of the House of Bourbon, a second collateral branch of the House of Capet, in the person of Henry IV. justly styled the Great, in 1588.

12. The reign of Louis XIV. often styled the Augustan age of France.

13. The French revolution.

* The Romans also gave the name of *Gallia Togata*, to Cisalpine Gaul, because the inhabitants wore the Roman *toga* ; that of *Gallia Braccata*, to the Provincia, on account also of the dress of the inhabitants ; and that of *Gallia Comata*, to *Celtic* Gaul, because the people suffered their hair to grow to an uncommon length.

14. The erection of France into an empire, and the accession of the family of Bonaparte, Dec. 2d, 1804.

Antiquities.] Several ancient monuments exist in France which are ascribed to the first epoch. The Greek colony at Massilia seems to have imparted some degree of civilization to the country, and the rude Gallic coins are evidently an imitation of the Grecian model.*

The Roman antiquities in France are numerous, and some of them in excellent preservation. Those at Nismes are particularly celebrated, consisting chiefly of an amphitheatre, and the temple called La Maison Carré. The architecture and sculpture of this building are so exquisitely beautiful, that it enchanteth even the most ignorant; and it is still entire, being very little affected either by the ravages of time, or the havoc of war. At Paris, in La Rue de la Harpe, may be seen the remains of a palace, or thermæ, supposed to have been built by the emperor Julian, surnamed the Apostate, about the year 356, after the same model as the baths of Dioclesian. The remains of this ancient edifice are many arches, and within them a large saloon. It is fabricated of a kind of mastic, the composition of which is not now known, intermixed with small square pieces of free stone and bricks.

In Arles in Provence is to be seen an obelisk of oriental granite, which is 52 feet high, and seven feet diameter at the base, and all but one stone. Roman temples are frequent in France. The most curious are in Burgundy and Guienne; and other places, besides the neighborhood of Nismes, contain magnificent ruins of aqueducts. The passage cut through the middle of a rock near Briancon in Dauphiny is thought to be a Roman work, if not of greater antiquity. The round buckler of massy silver, taken out of the Rhone in 1665, being 20 inches in diameter, and weighing 21 pounds, containing the story of Scipio's continence, is thought to be coeval with that great general. It would be endless to recount the different monuments of antiquity to be found in France, particularly in the cabinets of the curious. These have been greatly increased, during the revolution, by the spoils obtained in Italy, Egypt, &c.

According to Raymond the very summit of Mount Perdu, the highest summit of the Pyrenees, 10,000 feet above the sea, abounds with marine spoils, and must have been covered by the sea. This observation is confirmed by La Peyrouse. Thus the everlasting mountains tell the reality of Noah's deluge.

Other periods of French antiquity have been ably illustrated by the learned work of Montfaucon; and the disclosure of the grave of Childeric, near Tournay, in the last century, presented some of the most curious fragments. In an old tower of St. Germain du Pré are representations of several of the first monarchs of the

* In Picardy and other parts possessed by the Belgæ, there are circles, and other monuments of the kind which we call druidic. Near the town of Carnac, on the coast of Vannes, in Bretagne, there is a grand monument of this kind, far exceeding Stonehenge, if the account be not exaggerated, which says, that there are about 4000 stones, many as high as 18 or 20 feet, disposed in the form of a quincunx of eleven rows.

Franks, and many of their effigies were preserved on their tombs at St. Dennis, and other places, till the late revolution. The ruins of an amphitheatre are to be found in Chalons, and likewise at Vienne. Nismes, however, exhibits the most valuable remains of ancient architecture of any place in France. The famous Pont du Garde was raised in the Augustan age, by the Roman colony of Nismes, to convey a stream of water between two mountains for the use of that city, and is as fresh to this day as Westminster bridge : It consists of three bridges, or tiers of arches one above another ; the height is 174 feet, and the length extends to 723.

The monuments of the Carlovingian race are yet more numerous, and Roman mosaics have illustrated the fame of Charlemagne. The suit of tapestry, preserved in the Cathedral church of Bayeux, in Normandy, represents the beginning and termination of the grand contest between William and Harold, which led to the conquest of England by the Normans. It is said to have been the work of Matilda, wife of William ; and bears every mark of that remote antiquity.

Religion.] Before the revolution the established religion was the Catholic ; and, after the revocation of the edict of Nantes, in 1685, no other christian sect was legally tolerated. The Jews, however, were permitted to reside in various parts of the kingdom, under certain restrictions. The Pope had always less interest in the Gallican church, than in those of most other catholic countries, the benefice being entirely in the gift of the king. The French clergy were numerous, and their livings generally well endowed. In 1784, there were 18 archbishops, 111 bishops, 166,000 inferior clergy, and 5,400 monasteries and nunneries, containing 200,000 persons devoted to a monastic life. The church revenues amounted to 121 millions of livres. During the anarchy of the revolution, the established religion was abolished, and the worship of the Goddess of Reason was substituted. The church property and revenues were seized upon by the *Sans-Culottes* ; and the clergy were, in immense numbers, banished to Cayenne, or brought to the guillotine.

In 1800, during the consulate of Bonaparte, the catholic religion was reestablished ; but the various sects of Protestants were tolerated. France was divided into 10 archbishoprics ; that of Paris, containing 8 bishoprics ; that of Malines, containing 7 ; Besançon, 5 ; Lyons, 4 ; Aix, 4 ; Toulouse, 5 ; Bordeaux, 3 ; Bourges, 3 ; Tours, 7 ; and Rouen, 4. The church was rendered entirely independent of the Pope. The salary for the archbishops was fixed at 15,000 livres ; that of the bishops at 10,000 : both are appointed by the government. The bishops appoint the Curés. The Calvinistic churches, at the same time, were placed under the direction of consistories and synods. A consistory was established for every 6000 souls of this denomination, and 5 consistories formed the district of a synod. There is a seminary at Geneva for the education of the Calvinistic clergy. The Lutheran churches were committed to local consistories, having a jurisdiction equally extensive with those of the Calvinistic churches ; inspections, hav-

ing jurisdiction over 5 consistories ; and three General Consistories : one at Strasburg, for Augsburg and the departments of Upper and Lower Rhine ; a second at Mentz, for those of Sarre and Mont Tonnère ; a third at Cologne, for those of the Rhine, Moselle, and Roar. A seminary is established in the east of France for the education of the Lutheran clergy. These various bodies can assemble only with permission of the government.

As to the present state of the Catholic church, few of the curés are supplied ; and, where curés are found, they are, in most instances, ignorant and profligate. The existing public schools furnish so few of the means of education for the priesthood ; the annual stipend of the inferior clergy is so little ; and so much of that little is withheld ; and the morals of the French community are so generally corrupt ; that few can be found with the disposition, the courage, or the capacity, to discharge the clerical office.

Government.] From the time of Louis XI. to the death of Louis XVI. the French government had been an absolute monarchy, administered sometimes with mildness, often with cruelty. During the 14 years of the revolution, the government passed through almost every conceivable form, and at length settled into an iron despotism, under Napoleon Bonaparte. This despotism is military in its character, and must always depend on the army for its support. The imperial dignity is hereditary, in the order of primogeniture, to the exclusion of females and their descent. The members of the Emperor's family are to be princes. The Great Dignitaries are the Great Elector, the Arch Chancellor of the Empire, the Arch Chancellor of State, the Arch Treasurer, the Constable, and the High Admiral ; who rank next to the princes, form the great council of the Emperor, as well as that of the Legion of Honor, and are ex officio Senators. The Great Officers of the Empire are the Marshals, the Colonels General, and the Great Civil Officers. The most important of these last are the Minister of the Interior, of the Police, and of the Finances. All these are irremovable. The Emperor swears to respect, and cause to be respected, liberty of conscience, and the laws of the Concordat ; the equality of rights ; political and civil liberty ; and to levy no tax, but by virtue of a law. The Senate consists of the Princes ; of the Great Dignitaries ; of 80 members chosen by the Emperor from lists formed by the Electoral Colleges ; and of such other citizens, as the Emperor shall choose.

France is subdivided in 110 *Departments*, in each of which is a *Prefect*, and several *Sub-Prefects*. Their business is mechanically to execute the various orders of the government, particularly with regard to taxes and the conscription ; and to act as spies upon the inhabitants. The departments are divided into *communes*, in each of which is a *Mayor*, subordinate to the Prefects, and also employed to administer the revenue for local expenses. There are assemblies for the departments, and likewise for the communes. The time and duration of their sittings, and the subjects of their deliberations, are regulated beforehand at Paris. They do little more than vote, and apportion the taxes ordered by the minister of Finance.

The influence of the government is absolutely universal. It affects every individual, in all his conduct, and in all his interests. All the subordinate civil officers are spies. They investigate every man's circumstances, to see whether he has property to be taxed or extorted; and whether he is a candidate for the conscription or the bastiles.

The great means adopted by the government, to perpetuate this system, has been to corrupt, hopelessly, the morals of all the officers, civil and military; and then to appeal forcibly to their avarice and their love of power.

Population.] The Imperial Almanac of 1808 states the population of the whole empire, according to the census of 1807, at 36,350,987. Of these, 26,775,397 belong to old France; and of the remaining 9,575,600, 4,140,255 belong to the Netherlands; 3,291,291 to Italy, including that of Geneva; and 2,144,054 to Germany. If to these be added the population of Holland, that of the whole French empire, as it is in 1811, will amount to 38,352,403.

Colonies.] At the commencement of the revolution France had very valuable colonies in the West Indies, in South America, in Africa, and in Asia. At present, every one of them, except St. Domingo, is in the hands of the English. That island, we have already seen, forms an independent kingdom.

Army.] The following is an abstract of the account of the French army, at the close of the year 1807, as given in the Imperial Almanac of 1808.

	Officers.	Privates.	Total.
General Staff	2,049		2,049
Imperial Guards	847	14,498	15,345
Imperial Gens d'armes	693	16,752	17,445
Infantry	11,439	380,290	391,729
Cavalry	3,234	69,086	72,320
Artillery	2,367	49,937	52,304
Engineers	602	4,186	4,788
Veterans	770	13,180	13,950
 Total	22,001	547,929	569,930*

The officers in the first column are all commissioned. The second column includes both non-commissioned officers and privates.

The army, since 1798, has been raised by what is called the *Conscription*. This takes effect every year, and includes all the male population from the age of 20, to 25. All of this description are liable to be called into service whenever the government directs. Those of 20 are drawn out first. The others remain liable, till the end of the 25th year, whenever the quota required is deficient. If these are found insufficient, the conscription age is

* According to Herbin, the army of 1802, contained 600,949 men: the *Political Miscellany*, states that of 1805 at 414,125; and Bar. i says, that that of 1806 amounted to 610,976 effective men. In June, 1811, France had 800,000 men under arms.—[Exposé of the Minister of the Interior.]

changed, and youths from 16 to 20, and men of any age, over 25, are demanded. If the conscript can find a substitute whom the government will accept, he may get clear from personal service at an expense of from 4000 to 6000 francs* ; but, if the substitute desert, the conscript still must go, or procure another. If the conscript once sets out for the army, there is but little hope of his return. The term of service is limited only by the duration of hostilities. The day of drawing lots for the conscription is a day of public mourning ; and of anguish for every private family. For this reason, the public functionaries are obliged to employ every possible engine to accomplish the object ; threats and exhortations ; force and persuasion ; fraud and violence. Such a scheme of terror and oppression was never before known or imagined.†

Fortifications.] In 1810 and 1811 more than eight millions were expended on the forts of the Scheldt. Other works constructed at Ostend, Boulogne, Cherbourg, and Havre. "Havre had been constructed by Vauban : some years before the Revolution, it was thought proper, under foolish pretences, to destroy the fortifications. That city was left dismantled and exposed, which is the key of the Seine, and which may be properly called the port of Paris. It is now fortified, and in a state to support a siege."

At Corfu, a place already very strong, great works have been constructing for the last four years. New plans have been adopted, and this key of the Adriatic is guarded by 12,000 troops, having provisions for two years, and a numerous artillery provided for a siege of the longest duration.

Navy.] Hassel states it, in 1809, to amount to 40 ships of the line, and 30 frigates. It has since been increased. By the annexation of Holland to France she gained 13 ships of the line, and 10,000 seamen. Fifteen ships of the line were on the stocks at Antwerp in the summer of 1811 ; and arrangements were there made to add annually a great number of ships of war to the squadron in the Scheldt. More ships of the line were in building at Cherburg, L'Orient, Rochfort, Toulon, and Venice.

Revenue.] Hassel states the revenue of four years as follows :

	Franks.		Franks.
1803	664,500,000	1805	710,000,000
1804	700,000,000	1807	720,000,000

That of 1807 was raised in the following manner :

I. DIRECT TAXES		311,840,635
1. Land tax		244,458,974
2. Poll and furniture tax		35,381,711
3. Door and window tax		16,000,000
4. Patent tax		16,000,000
II. INDIRECT TAXES		378,159,215
1. Stamp, Domain, Record, and Forest taxes	}	180,000,000
2. Tolls and salt duties		80,000,000

* Five francs are commonly said to make a dollar ; but a franc is more exactly 18 cents, $\frac{74}{100}$ or 4s2 sterling.

† See Faber's Sketches.

3. Lotteries	12,000,000
4. Post office	11,000,000
5. Trading companies	68,000,000
6. Tobacco and salt pits	5,000,000
7. Eastern salines	4,625,739
8. Powder and saltpetre	1,000,000
9. Mint	540,000
10. Remainder of former taxes	8,000,000
11. Various revenues	7,993,576
III. EXTERNAL REVENUES	30,000,000
	<hr/>
	720,000,000*

To this should now be added the revenue of Holland, amounting to £ 4,375,000 sterling.

The expenditure of that year, as estimated by the same author, equalled the revenue, viz.

Interest of national debt	75,159,000
Civil list	28,000,000
Service of the state	616,841,000
	<hr/>
	720,000,000

The national debt, in 1807, was estimated at 2,000,000,000 francs.† A sinking fund of 60,000,000 was established in April, 1806.

The French Budget for 1811, was as follows, viz.

	Livres.
Perpetual debt	62,300,000
Ditto of Holland	26,000,000
Floating debt	16,300,000
Ditto of Holland	1,200,000
	<hr/>
	105,800,000

Pensions.	
Pensions civil and Military	10,000,000
Ditto of Holland	3,300,000
Ecclesiastical pensions,	28,900,000
Civil list and French princes	28,300,000
	<hr/>
	80,500,000

Services.	
Judicial salaries	27,466,000
Exterior relations	8,800,000
Interior	60,000,000
Finance	24,000,000
Imperial treasury	8,100,000
War	230,000,000
Commissariat	180,000,000
Marine	140,000,000
Public worship	16,500,000
General police	2,000,000
Expenses of negotiation	8,500,000
Fund of reserve	23,034,000
	<hr/>
Grand Total	954,000,000

* 30,000,000l. sterling.

† 83,333,333l. sterling.

The current money of France used to be computed at £90,000,000, sterling, when that of G. Britain was estimated at £ 40,000,000.

Political Importance and Relations.] France, at present, is by far the most powerful nation on the continent, and has commanding influence in almost every cabinet of Europe. Holland, the Netherlands, a part of Germany and Italy, are integral parts of her empire. The States composing the Confederation of the Rhine, Switzerland, and the residue of Italy are mere dependencies. Denmark and Sweden are barely above a state of vassalage. The dissolution of the Germanic body, the late misfortunes and losses of Austria, and the disgraceful alliance by which they were terminated, prove at once how low her government is sunk, and how little can be hoped from her exertions. Prussia must side with France or Russia, when they quarrel, and will fall to the conqueror. Russia has always been at a distance from the scene of action, and her whole strength has never been called forth. She has, on the whole, been a gainer by the troubles of Europe, in extent, wealth, and population. With a great man to direct her resources, she would meet, without fear, the legions of the French Emperor, and stand with Great Britain, a bulwark of almost subjugated Europe. But the House of Romanof has lost its original greatness. Turkey is kept from crumbling to pieces by the compression from without. She is safe, however, so long as France and Russia cannot agree as to the division.

The resources of France may be estimated, with considerable accuracy, from the following table, in round numbers, of the population, and armies of the empire, and of the several states which are now dependent :

	Population.	Army.
France	36,351,000	570,000
Dependencies	2,978,000	20,000
Holland	2,001,000	22,000
Confed. of the Rhine	16,928,000	205,700
Kingdom of Italy	6,389,000	40,000
Naples	4,964,000	21,600
Ecclesiastical state	68,000	4,700
Switzerland	1,638,000	15,000
Denmark	2,609,000	75,000
Sweden	3,191,000	43,000
<hr/>		<hr/>
	77,717,000	1,057,000

Manners and Customs.] The French are distinguished for taste and elegance in their houses, furniture, equipage, and dress ; for ease and gracefulness of manners ; for quickness of apprehension ; for vivacity and gaiety of temper ; and for a perpetual fondness for amusement and pleasure. This is the bright side of the medal. The reverse, painful and distressing before the revolution, is now loathsome and awful. During the revolutionary period of anarchy, the morals of the nation, distinguished for their corruption before, were rendered immensely more corrupt by profligate rulers and profligate literati. The restraints of law, of

religion, and of decency, were taken off, and the worst passions of the mind were kept in a steady and violent action. This state of things produced in those, who were already grown up, a hopeless abandonment of principle and of decency ; while it cut off the young, not only from the possession of them, but even from the knowledge of what they were. The present government, so far from remedying these evils, has only increased them. The French, as a nation, are at present, by the confession even of sober and discreet Frenchmen, false and faithless ; revengeful and sanguinary. The law of divorces has rendered marriage the mere cover for prostitution ; and France presents at this moment the picture of one great common brothel, in which every variety of lewdness is indulged without shame and without restraint. The only liberal education is that for the army ; and the young men of promise and of rank have only this advantage over their inferiors, that they are earlier fitted for scenes of barbarity and bloodshed. This sanguinary education explains the havoc and the ruin, which every where mark the progress of French arms ; and which have rendered Frenchmen the objects of terror and abhorrence wherever they are known.

Language.] The French is a corruption of the Latin, with many Gothic and some Celtic words intermixed. Even in the 10th century it was called the *Romance*, a name afterwards transferred to the tales and poems of chivalry, which are written in this dialect. The language did not attain to classical purity, till the reign of Louis XIV. The earlier specimens both of prose and poetry are, in a greater or less degree, rough and barbarous. It was always a commanding object with the government to extend the French language and French fashions ; and at this time the language is more universally diffused than any other in Europe. Its purity has, however, been very much corrupted by the introduction of new and barbarous words and phrases since the revolution.

Literature.] The French were long distinguished for their attention to elegant literature ; and their researches in mathematical and physical science have been highly respectable. Even in the Roman period we find Ausonius, Sidonius Apollinaris, and Sulpitius Severus, who has been styled the christian Sallust. After the conversion of the Franks to christianity, the literature of the nation was confined chiefly to the ecclesiastics. Among these Gregory, of Tours, is distinguished by his History of France, his Lives of the Saints, and his Credulity. At the period of the reformation, France may boast of having given birth to Calvin, a man surpassed by no one of the reformers in vigor of intellect, or force of eloquence. Descartes, in spite of his whims and his vortices, ranks high among natural philosophers. He was the first who applied algebra to the solution of geometrical problems. Any nation might have been proud of D'Alembert, as a mathematician. Buffon in natural history would yield the palm only to Linnaeus, while in chemistry, Lavoisier, Fourcroy, and Chaptal may claim a full equality with Black, Priestley, and Davy. In the eloquence of the senate and of the bar, the French, for obvious

reasons, cannot vie with the English ; but in the pulpit, Bos-suet, Bourdaloue, Massillon, and Saurin can find few competitors. Robert Hall alone can challenge a decided superiority. In epic poetry the French have as yet done nothing ; for the Henriade of Voltaire is the effort of a child. But the tragedies of Corneille, of Racine, and of Crebillon, and the comedies of Moliere, can never be forgotten ; while in sound criticism and elegant satire, Boileau stands unrivalled since the days of Horace. In the lighter belles lettres, the French are distinguished for the number of their agreeable writers ; among whom may be mentioned Montaigne, D'Argens, Rousseau and Marmontel. At the present time science is encouraged, only as it has a tendency to promote the views of the government. The attention of the French savans, therefore is chiefly directed to the mathematics and the various branches of natural history. Hardly a man of learning, in the appropriate sense of the word, is to be found in the nation. The study of the Greek and the oriental languages has been banished from the public schools, and the writers of antiquity are seen only in a French costume.

Education.] By the imperial decree of April 1808, the various schools, academies, and colleges of France are connected together, and form the *Imperial University*. This is composed of as many *Provincial Academies*, as there are courts of appeal in the empire. The schools belonging to each Academy are arranged in the following order. 1. The *Faculties*, for the more profound sciences, and for the conferring of degrees. 2. The *Lyceums* or *Lycées*, for the classics, history, logic, mathematics, and physics. 3. The *Colleges*, for the elements of the classics, of history, and of the sciences. 4. *Schools kept by private masters*, in which the instruction approaches that of the Colleges. 5. *Boarding schools*, where it is less severe. 6. *Primary schools*, were reading, writing, and arithmetic are taught. The members of the faculties are men of mere science, and those who are soon to be the professors of the inferior institutions. Of the Lyceums there are 45 in the empire. Each has a board of 8 professors, and a library of 1500 volumes, both selected by the government. No additional books can be introduced without the permission of the minister of the interior. The government also prescribes the price of tuition, the internal discipline, and the course of instruction. Arrest and imprisonment are the only punishments inflicted on delinquents. The course of studies embraces the latin, history, chronology, geography, the belles lettres, the mathematics, and natural philosophy. Beside the professors, there is an officer intitled *L'Officier Instructeur*, who is charged with the military instruction of the pupils. They are divided into companies of 25 with each a sergeant major, a sergeant, and 4 corporals. They assemble at given hours of the day, and go through with all the military evolutions. The students are composed of the children of the wealthy families of France, and of those who are educated at the public expense. Of these last the government may, by law, maintain four thousand from old France, selected from the best proficients in the colleges ;

and two thousand four hundred from the territories lately annexed. Those who maintain themselves may enter the Lyceums without any previous instruction, except that of reading and writing. They correspond only with their relations, and their letters are subjected to the perusal of the faculty. They are not privileged from the conscription; and if they escape it during their scholastic career of six years, they are then drafted for it, or transferred to the military academies, or employed as public functionaries in the departments. The students educated at the public expense, are said to exceed in number those educated by their parents at the Lyceums. The professors are generally persons of slender abilities, and are very miserably supported by their salaries. The buildings appropriated to these institutions are in a neglected and mouldering state.

In each of the colleges the government maintains 25 students. Little solid instruction, however, can here be obtained. The inferior schools are absolutely neglected. The poverty of the rural communes; and the want of capable teachers, are the reasons assigned by the director general. Scarcely any of the common people are able to read and write, and their ignorance is not compensated by religious instruction. The instructors of all these various seminaries are appointed directly or indirectly by the government. The military academies contain about fifteen hundred young men, all supported by the state. They are selected from the alumni of the Lyceums. The term of instruction is two years. They are supplied with the ablest professors, and are in every respect admirably organized. They send forth annually a host of accomplished officers, engineers and mechanicians.*

Cities and Towns.] The number of large and populous towns in France is so great, that only a small part of them can be particularly described. Exclusive of those in Holland and the Netherländs, there are considerably more than 100 towns in the empire whose population exceeds 10,000.

Paris, *Lutetia, Lutetia Parisiorum*, and *Parisii*, was the capital of the *Parisii*, a tribe of the Celts, who set fire to it when they were invaded by Cæsar. It was rebuilt by the emperor Julian, and enlarged by Clovis, who made it the royal residence. It was then neglected, till about 954, when Hugh Capet made it the capital of the kingdom. It has been the capital ever since. It is built on an extensive plain on both sides of the Seine, and on three islands in that river, in a healthy and pleasant situation, with de-

* "All public education ought to be regulated on the principles of military discipline, and not on those of civil or ecclesiastical police.—The habituate of military discipline is the most useful, since at all periods of life it is requisite for the citizen to be able to defend his property against internal or external enemies.

"Ten years more are still requisite for realizing all the benefit which his majesty expects from the University, and for accomplishing his views; but already great advantages are obtained, and what exists is preferable to what has ever existed.

"For the primary instruction of children his majesty perceives with pleasure the establishment of small schools; he desires their increase.

"Besides the houses of St. Dennis and ——, six houses have been established for the education of girls whose fathers have been devoted to the service of the state."—[*Expose of the Minister of the Interior, June, 1811.*]

lightful environs ; and is said to be 11 miles in circumference. It covers a very large freestone quarry, which has furnished materials for most of the houses, and has been so extensively excavated, that an earthquake might easily bury the city. The number of houses is 32,000, from four to seven stories high, generally handsome, and with uniform fronts. The population in 1807, was 547,756. The finest public buildings are the Louvre, one of the noblest specimens of modern architecture, the church of St. Geneviève, the Tuilleries, the Palais Royale, and the Hospital of Invalids. The city has been enlarged, and greatly improved, since the revolution : particularly by the collections of paintings, statues, and other objects of taste and curiosity, which have been plundered from the conquered countries. Paris surpasses London in magnificence, but yields to it greatly in cleanliness and convenience. The streets are generally without sidewalks for foot passengers, and the narrowness of many of them renders this a very serious inconvenience. There are 12 bridges over the Seine, and 26 fine quays along its banks. There were, before the revolution, 88 churches, 40 chapels, 10 abbeys, 28 priories, and 103 convents, besides numerous hospitals and seminaries.*

Marseilles, *Massilia*, has already been mentioned as founded by the Phoeceans. It is seated at the foot of a rocky mountain near the sea, and is divided into the old and new town. The former is on an eminence, has narrow crooked streets, and mean houses ; in the latter the streets are straight and broad, and the houses handsome. The harbor, a parallelogram, with buildings on both sides and one of the ends, is well defended, capacious, and one of the best in the Mediterranean ; but the entrance has not depth of water enough for men of war. Here is a large arsenal, and one of the finest armories in the kingdom. The population, in 1807, was 96,413.

Bourdeaux, *Burdegala*, is built on the W. bank of the Garonne, about 40 miles from its mouth. The tide flows quite up to the city ; its port is ample, commodious, and strongly fortified ; and ships of considerable burden may unload at the quays, which are grand and extensive. It is the first commercial town in France, and formerly it was not unusual to see 400 or 500 vessels in the harbor at once. The chief exports were brandy and claret. The

* "The canal of l'Oureque, and the distribution of its waters in the different parts of Paris, are attended with an expense of two million and a half of francs a year. In a few years these works will be completely finished."

"Already sixty fountains spread the waters of the Oureque in the different quarters of Paris. The water arrives there constantly.—The Seine, the Marne, the Yonne, and the Oise, have considerable works constructing on them to improve the navigation."

"The cut of St. Maure which will be finished in the next year, will shorten the navigation of the Marne by five leagues, and will spread its waters by numerous channels. The sluices constructed at Port d'Arche, at Vernon, and at ——, will facilitate the navigation of the Seine ; and other sluices will continue it to Troyes and l'Aube."

"The bridges of Choisy, Besen, and Jena, facilitate the communications, or concur in the establishment of the capital."

"The Louvre is finishing ; they are pulling down that quantity of houses which was between the Louvre and the Tuilleries. A second gallery re-unites the two palaces." [Expose of the Minister of the Interior, June, 1811.]

theatre is the most magnificent of any in France. The tower-gate, constructed in the time of Augustus; the amphitheatre, an oval of 227 feet by 140; and the palace of Gallienus, are among the vestiges of Roman art and grandeur. The annual temperature of Bourdeaux is 56.8°. The population in 1808, was 90,992.

Lyons, *Lugdunum*, at the conflux of the Rhone and the Saone, was built by Plancus 10 years before the birth of Christ. It was the second city in France before the revolution, and is said to have contained 150,000 souls. It was the centre of the inland commerce in this part of the kingdom, and the seat of the most extensive manufactures. Irreparable injury was done to the city by the jacobin party, in consequence of the fidelity of the inhabitants to the king. In 1802 it had 11,000 houses, and 88,919 inhabitants.

Rouen, *Rotomagus*, the ancient capital of the *Velecasses*, is built on the Seine, and is a large commercial and manufacturing town. In 1802 it had about 10,000 houses, and 84,223 inhabitants.

Nantes, *Condivennum*, the ancient seat of the *Nannetes*, is situated on the Loire, and is one of the largest trading cities in France. It had in 1807 about 13,000 houses, and 77,162 inhabitants.

Toulouse, *Tolosa*, the chief city of the Tolosates, is built upon the Garonne. The streets are broad, and the houses chiefly of brick. The town annals, kept since 1288, contain all the memorable transactions of the kingdom. A few miles below, the canal of Languedoc joins the river, which here becomes navigable. It had 50,171 inhabitants in 1802.

Strasburg, or *the city of the street*, so called because it is the thoroughfare between France and Germany, is situated at the conflux of the Ile and the Brusch, about a mile from their entrance into the Rhine. The cathedral is a beautiful Gothic structure of the 11th century. The town was taken from the emperor in 1682. Most of the inhabitants are Lutherans. Here are manufactures of tobacco, china, steel, lace, carpets, cloth, and leather. Houses 4000; inhabitants, in 1802, 49,056.

Cologne, *Colonia Agrippina*, in the ancient territories of the *Ubii*, is built in the form of a crescent on the Rhine, and is fortified in the ancient manner; but its walls are weak and tottering. It extends $5\frac{1}{2}$ miles along the river. The streets are narrow, winding, and gloomy; and most of the houses high, old, and ruinous. It contains very numerous churches, chapels, and monasteries; and an uncommon number of ecclesiastics and beggars. The few protestants who live here engross all the wealth of the city. This place is two centuries behind the rest of Germany in improvement. The quay, a mile and a half long, is always crowded with shipping; but the cargoes are the property of foreign merchants. Inhabitants, in 1807, 42,706.

Orleans, *Genabum*, in the country of the ancient *Carnutes*, stands upon the Loire, and is one of the most agreeable cities in France. The principal trade is in stockings, sheepskins, brandy, corn, and wine. Inhabitants, in 1802, 41,937.

Amiens, *Samarobriva*, the capital of the ancient *Ambiani*, is built on the Somme. It abounds with woollen manufactures. The

cathedral is large and beautifully light and decorated. Houses, in 1807, 5980; inhabitants 41,279.

Nismes, *Nemausus*, at a little distance from the Vistre, is large and pleasantly situated on the side of a hill, covered with vineyards and orchards of fruit. Here are manufactures of cloth, silk, and stockings. Here likewise are reliques of Roman art of uncommon beauty and magnificence. The amphitheatre is a prodigious work, capable of holding 17,000 persons. The temple of Diana, the grand tower, the ancient baths and the Maison Quarré, a temple of the Corinthian order; all discover exquisite taste, and are in perfect preservation. Houses, in 1807, 4,500; inhabitants 39,594.

Angers, *Juliomagus*, the chief town of the ancient *Andes*, stands at the confluence of the Maine, the Little Loire, and the Sarte. It has 16 parish churches. The cathedral is a beautiful building. The castle is built upon a rock. It had in 1802, 5410 houses, and 33,900 inhabitants.

Montpellier stands upon a rising ground fronting the Mediterranean, which is about nine miles to the south. On the north is an agreeable plain extending about the same distance to the mountains of the Cevennes. In clear weather the Alps are distinctly visible to the east, the Pyrenees to the southwest, and the Mediterranean to the south. The streets are generally narrow, and the houses dark. The climate was long famous for its mildness and salubrity. It is said to have altered. Here are manufactures of silk and woollen goods. Cette is the port of Montpellier. The goods are carried up to the town on the canal. Houses, about 8,000, and inhabitants, in 1807, 32,723.

Metz, *Divodurum*, anciently the capital of the *Mediomatrici*, and afterwards of the kingdom of Austrasia, stands at the conflux of the Seille and Moselle. The houses, though old fashioned, are handsome, but the streets are narrow. The town is well fortified, and in 1807, contained 5,827 houses, and 32,099 inhabitants.

Caen lies in a valley, at the conflux of the Orne and Odon, about seven miles from the English channel. It has a good trade in cloths and fine linen. The royal square is spacious and regular. In 1807, it had about 10,000 houses, and 30,923 inhabitants.

Rheims, *Durocotorum*, anciently the capital of the *Rhemi*, is situated on the Vesle. It has several fine remains of Roman antiquities. Formerly the archbishop of Rheims was the first peer of France, and always crowned the king. In 1802, it had 30,225 inhabitants.

Clermont, *Augustonometum*, a town of the *Arverni*, is seated on a small eminence at the foot of a lofty mountain. A wooden bridge, over a brook in one of the suburbs, is completely petrified. Inhabitants, 30,000.

Besançon, *Visontis*, on the Doubs, the ancient capital of the *Sequani*, is surrounded by high mountains, and badly fortified. Here are many remains of Roman magnificence. It contained, in 1807, 3,293 houses, and 28,436 inhabitants.

Nancy, *Nasium*, the capital of the *Lingones*, and afterwards of

the duchy of Lorraine, stands upon the Meurte, in a beautiful and fertile plain. In 1807, it contained, 28,227 inhabitants.

Versailles, at the close of the last century, was a little village in the midst of a forest. Louis XIV. made it the royal residence. It contained, in 1802, 27,574 inhabitants.

The large towns taken from Italy will be described under that article.

The following towns are not in the table : Abbeville 18,125 inhabitants ; Aach 24,419 ; Aix 21,009 ; Arles 18,470 ; Bayonne 13,190 ; Beziers 14,535 ; Chalons, on the Marne, 11,120 ; Châlons, on the Saône, 10,431 ; Cherbourg 11,389 ; Coblenz 10,691 ; Etienne 16,259 ; Falaise 12,549 ; Issoudun 10,265 ; Lisieux 10,171 ; Lunéville 10,436 ; Mentz 21,583 ; Moissac 10,035 ; Montauban 21,958 ; Orient 17,837 ; St. Quintin 10,458 ; Rennes 25,984 ; Riom 13,828 ; Sens 10,603 ; Servans 10,150 ; Thiers 10,605 ; Verdun 10,172 ; Verviers 10,072 ; Vienne 10,362 ; Ville Franche 10,009.

Seaports.] Several have already been mentioned. Toulon on the Mediterranean, a little east of Marseilles, has an outer harbor which is large, circular, and surrounded by hills. The entrance on both sides is defended by a fort with strong batteries. This harbor communicates with two inner basins, called the old and the new harbor, which are also connected by a canal. The new harbor is an artificial basin, the work of Louis XIV. It is well defended by batteries, and round it stands the arsenal, where every man of war has its own particular storehouse. Here cordage and cannon are extensively manufactured. Toulon is the only harbor for the navy on the southern coast. Houses, 2400 ; inhabitants, 29,760.

Brest, *Portus Brivates*, is the chief resort of the navy on the western coast. The houses, 2600 in number, are planted on the declivity of a hill, on one side of the harbor. The streets are few, narrow, and inconvenient. It has two parish churches, a marine seminary, a court of admiralty, and 25,865 inhabitants. The harbor, if we except Toulon, is the largest and safest in the kingdom, and capable of containing 500 ships of war, in 8, 10, and 15 fathoms, at low water. Its entrance from the W. S. W. called the "Gullet" is narrow and rocky, and the passage is difficult and dangerous on account of the sunken rocks on both sides. The entrance is also guarded, on one side, by a strong castle, seated on a rock, and defended by a large ditch and other fortifications ; and on the other by a strong tower. On one side of the port is a noble quay, more than a mile long, and two hundred paces broad, covered with storhouses ; and a quay for the warehouses on the other. At the bottom of the harbor are two noble docks for the building of ships of war.

Boulogne, *Gesoriacum*, and afterwards *Bononia*, lies on the English channel, on the declivity, and at the foot of the chalk mountain. It has 1600 houses, and 10,685 inhabitants. The harbor, formed by the river Liane, is defended at the mouth by a small fort. The entrance is difficult. Here lay the flotilla, in 1804 and

1805, prepared for the invasion of Great Britain. Ships of war can proceed no farther than the road of St. John, where there is from 5 to 15 fathoms, and a hard sandy bottom. The famous pharos, built by Caligula, and repaired by Charlemagne, fell down in July 1644, and is now a heap of rubbish. The channel is here 30 miles wide, and much frequented by English smugglers.

Rochefort, on the bay of Biscay, has 15,024 inhabitants, the harbor has four fathoms, at low water, and is defended from every wind. Here are excellent docks for building ships, and magazines well replenished with naval stores. A part of the navy usually lies here.

Rochelle, *Portus Santonum*, eight leagues N. of Rochefort, contains 17,331 inhabitants. Its commerce is extensive. The harbor is safe, but its entrance is narrow and shoal. The fortifications are by Vauban. The neighboring salt marshes, here as well as at Rochefort, render the air unwholesome.

Bayonne, at the corner of the bay of Biscay, is a league from the sea, on the Nive, which forms a good harbor, with a narrow and dangerous entrance. The commerce with Spain is valuable. Masts, from the Pyrenees, are brought here, and shipped to Brest and other ports. The common people speak the old Biscayan language. Inhabitants, 13,190, houses 1520.

Dieppe, the nearest sea port to Paris, is a handsome well built town, containing 20,000 inhabitants. The harbor is semicircular, and has two fine moles of strong brickwork. In time of peace, the commerce is extensive, particularly in the fisheries. Here are numerous thread lace manufactures. The shortest route from London to Paris is through Brighton and Dieppe.

Havre, or Havre de Grace, *Carrocotinum*, a town of the *Caletes*, lies a little north of the mouth of the Seine. The harbor has depth for large vessels, and the water does not ebb, till three hours after full tide, being as it were dammed up by the current of the Seine, which crosses its mouth. Havre, in 1802, had 1500 houses, and 20,620 inhabitants.

"At Antwerp, since the end of the year 1810, the dam from the basin has been removed. Eighteen ships of the line, even three-deckers, can enter, and go out fully equipped. In the beginning of this year, two 80 gun ships have been coppered and refitted there. The works are going on with great activity. Before the end of next September, the basin will be able to hold thirty ships.

"Ships of the line can only enter the basin of Flushing without their guns. The sluice is now dried and insulated, and they are busied in lowering it, so that twenty ships will be able to enter it with their guns. The keys that the English had overthrown, are re-established. Men are at work to rebuild the general magazine; and are placed out of the reach of the bombs.

"The first funds have been provided for the basin of Terneuse; its foundation is laying. Twenty ships of the line entirely armed, will be able to depart from this basin in a single tide. It will be capable of containing more than forty.

"The tide sluice of Ostend is terminated; it has done the great-

est good to the harbor; that of Dunkirk will be in play at the end of the year; great advantages are expected from it for the digging of the pass. The sluice of Havre is completed; it has happy effects.

"At Cherbourg, the expenses of the road are of two sorts. The first operation is to raise the dyke above the low water mark, and this will be accomplished in the course of the present year; the second is to construct forts at the extremities of this dyke to defend the road; the fort of the centre is just finished. The road being in this manner secured, it remained to dig the port of this great work; nine tenths are executed. Thirdly, ships of the line will be able to lie in the port and basin; already a vessel which had received damage at sea has entered the basin, and been refitted there. The *avant-port* and basin will be finished in 1812. The building docks and frames already exist. The works of Cherbourg alone require more than three millions yearly."*

Edifices.] Several of the most noble edifices of France are in Paris, and its vicinity. To those already mentioned must be added, the palace of Versailles, rather remarkable, however, for the profusion of expense, than for the skill of the architect; the parts being small and unharmonious, and the general effect rather idle pomp than true grandeur. The bridge of Neuillé is esteemed the most beautiful in Europe, consisting of five wide arches of equal size. The ancient cathedrals and castles are so numerous that it would be idle to attempt to enumerate them; and the French nobility were not contented, like those of Spain, with large houses in the cities, but had grand chateaux scattered over the kingdom, to which, however, they seldom retired, except when compelled by formal banishment from the court.

Roads.] In the improvement of the roads the distances are lessened.—It has been computed that Turin has already been brought 36 hours nearer Paris, 24 hours by the passage of Mont Cenis, and 12 hours more by the new road of Maurienne. A new road from Paris to Chamberry by Tournees has been established. This road, by avoiding the mountains, will be shorter by eight hours. In this manner Turin will be brought nearer to Paris by 44 hours, which is almost half the distance. Milan is by the road of Simplon brought nearer Paris by more than a march of 59 hours, if the present road is compared with that which existed ten years ago. Bayonne, and Spain have been brought nearer to Paris by 18 hours, by the road which has been made through the sandy plains between Bourdeaux and Bayonne. Mayence and Germany have been brought 12 hours nearer, by the road which has been made in the sands from Mayence to Metz. Hamburg will be nearer by more than 60 hours in the course of the next year, by the road made across the sands of Maestricht to Wesel, and from that to Hamburg: and this will be the first example in history of 80 leagues of roads made in the course of two years. Ten sets of workmen are

* Exposé of the Minister of the Interior, June, 1811.

employed; and before the year 1811, much more than half of it will be finished. Amsterdam will be brought twelve hours nearer Paris by the road through the sands of Antwerp to Amsterdam, at which they are labouring at many points. New roads are opened from Spezia to Parma, from Florence to Rimini, and from Nice to Genoa.

The construction of a great number of bridges is begun. Those of Bourdeaux, Rouen, as well as that over the Durance, which was finished last year were considered as impossible. A great number of other bridges are also finished.*

Inland navigation and Canals.] The inland navigation of France has been promoted by several capital exertions. The canal of Briare, otherwise styled that of Burgundy, was begun by Henry IV. and completed by Louis XIII. opening a communication between the Loire and the Seine, or in other words, between Paris and the western provinces. Passing by Montargis it joins the canal of Orleans, and falls into the Seine near Fontainbleau. This navigation of forty two locks, is of great utility in inland commerce.†

The canal of Picardy extends from the Somme to the Oise, beginning at St Quintin, and forming a convenient intercourse to the provinces in the N. E.

But the chief work of this description is the celebrated canal of Languedoc, commenced and completed in the reign of Louis XIV. by Riquet, the engineer, under the auspices of that able minister Colbert. Fifteen years of labor were employed, from 1666 to 1681. This noble canal begins in the bay of Languedoc; and at St. Perriol is a reservoir of 595 acres of water: it enters the Garonne about a quarter of a mile below the city of Toulouse. The breadth, including the towing paths, is 144 feet; the depth 6 feet; the length 64 French leagues, or about 180 miles. The expense was more than half a million sterling. The canal of St. Quintin is finished. From the beginning of this year (1811) navigation has been in great activity upon it; its effects have already been felt in the prices of wood and coal in the metropolis. The canal of the North, to unite the Rhine and the Scheldt, was one third part finished, when the union of Holland having made it useless, these works were suspended. The canal of Napoleon, which joins the Rhine and the Saone is to be finished in 1815. Three millions a year are applied to it. The canal of Burgundy, which joins the Saone and the Seine, is continued with spirit. In the course of this year (1811) a million and a half will be expended upon it. The canal of Arles, which brings the Rhone to the Pont-du-bone, is one third part executed. That which cuts the peninsula of Bretany, in joining the Rhone to La Vilaine, is now going on. The canal of Blouet, which joins Napoleonville to L'Orient, and which will one day lead from Napoleonville to Brest, is almost finished. Many other canals, of less importance, are either finished or going on with the greatest activity.‡

* Expose of the minister of the interior, June, 1811.

† Philips, 51.

‡ Expose of the Minister of the interior, June, 1811.

Manufactures.] For a century extending from 1650 to 1750, Mr.* Young supposes France to have possessed the most flourishing manufactures in Europe; and French writers effect to speak of the English manufactures as being of recent fame. A sketch of this important subject, is here traced from that well-informed author. At Abbeville was a famous manufacture of broadcloth; and another at Louviere in Normandy. At the same place, and at Amiens, were manufactures of stuffs, worsteds, &c. and some of cotton. The manufactures of Orleans were stockings, and refined sugar. At Chatteau Roux another manufactory of broad cloths; and in the same neighborhood large iron forges. At Limoges a hundred looms were employed in weaving druggets of hemp and wool; and the paper mills amounted to seventy. The large woollen manufactory at Cahors had declined; but those of Montauban continued to flourish. At Montpellier were considerable manufactures of blankets and silk handkerchiefs; but those of Nismes were still more important in silk, cotton, and thread: and at Gange was the chief manufacture of silk stockings in all France. The Londrins for the Levant were chiefly made at Béziers-de-Rieux, and at Carcassonne. At Pau are large manufactures of linen. Tour has long been celebrated for silks. Beauvais, one of the most active towns in France, supplies tapestries and printed calicoes. The fabrication of plate glass at St. Gobin is well known as the first in Europe. At St. Quintin are made linen, cambric, and gauzes. Cambricks derive their name from Cambray; and the laces of Valenciennes have been long known. Lisle displays fine cloths and camblets. Mr. Young styles Rouen the Manchester of France, being a town eminent in commerce, and in manufactures of velvet, and cotton cloths; and Caen boasts of her silky fleeces. Bretagne in general has numerous manufactures of thread and linen. The fine cloths made at Louviere our author esteems the first in the world, and at the same place is a large cotton mill. Rheims is remarkable for woollens. The silk manufactures of Lyons were estimated to employ 60,000 people, the looms being computed at 12,000. Iron manufactures flourished at Nantes, Mont Cenis, St. Philippe-en-foret, and several other places.

Commerce.] From this detail some idea may be formed of the commerce of France. By the account for 1784, which did not include the provinces of Lorrain and Alsace, nor the West Indian trade, the statement was

Total exports,	307,151,700 livres.
— imports,	271,365,000
Balance,	35,786,700 or £1,565,668 sterling.

The trade with the West Indies gave a large balance against France, which, in 1786, exported to the amount of more than 64,000,000 livres, but the imports exceeded 174,000,000. The chie-

* Young's France, i. 569.

articles of import were raw silk, raw wool, olive-oil, linens, cotton, manufactured cottons, tobacco, copper, iron, flax, cattle, brandy, soda and potash, timber, coal, steel, wheat, and hemp. The average imports of France in 1788 were about twelve millions and a half sterling, the exports nearly 15,000,000. The imports of Great Britain in the same year were about 18,500,000, the exports seventeen and a half.* The principle exports were, woollen and cotton manufactures, claret, other wines, brandy, cattle, wheat, and leather. At present France has no commerce on the ocean.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

[*Climate and Seasons.*] THE eastern part of France is warmer than the western, in the same parallels. Mr. Young divides the country into four climates. A line passing from Herbignac, a town a little north of the mouth of the Loire, nearly straight through Beaumont, Clermont and Couci, to the Rhine, will leave a tract to the N. W. called the *northern climate*, in which the vine will not grow. It is considerably warmer than England, but equally moist; and produces a great variety of fine fruits. The *vine climate* is a space included between this and a line passing nearly parallel with the other, from the mouth of the Garonne, through Ruffec and Luneville. This is the pleasantest. The air is light, pure and elastic; and the sky is generally clear. The summers are not fervid, and the winters are mild. The *maize climate* is broader. Its southern boundary is a line passing from the Pyrenees through Carcassonne and Grenoble to the Alps. The vine also grows here luxuriantly. The tract S. E. of this line is called the *olive climate*. It is much the smallest, and in the summer season is crowded with myriads of flies. Both vines and maize grow here abundantly. This division of France, which with here and there a set-off, is strictly accurate, points out the eastern side of the kingdom, as $2\frac{1}{2}$ degrees of latitude hotter than the western, or at least more favorable to vegetation.

Violent storms of rain and hail are frequent in the two middle divisions. In some provinces the average damage for a given number of years, by rain and hail, equals a tenth of the whole produce for that period. In these districts, also, spring frosts are customary. This renders the vineyard an uncertain culture, and explains why so few mulberries are found for the silk-worm except in the southern. Even there, they frequently suffer.

[*Face of the Country.*] France, north of the mountains of Auvergne, and west of the range of the Vosges, may be called an

* Young, i. 520.

uneven country; but is no where mountainous. The surface is every where sufficiently varied to render the prospects interesting. Between the Pyrenees and the mountains of Auvergne, lies an extensive tract of the same description, reaching from the ocean to the Rhone. Limosin surpasses every province of France in beauty. Hill, dale, wood, inclosure, streams, lakes, and scattered farms are mingled into a thousand delightful landscapes. The banks of the Seine for 200 miles from its mouth, and of the Loire as high as Angers, are also eminently beautiful. The course of the Soane is marked by a noble tract of meadows. The country east of the Rhone presents many pleasing scenes, and the course of the Isère is a scene of perpetual beauty. The Pyrenees are the most striking of the mountains, and their verdure, their woods, their rocks and their torrents have all the character of the sublime and beautiful.

Soil and Agriculture.] The north part of France, from Dunkirk to Caen, thence to Tours on the Loire, and thence through Nemours and Soissons, to the Netherlands, is a rich calcareous plain, having a loam of considerable depth, and of an admirable texture. Farther W. the land is poor and stony. The rest of Normandy, Brittany, Maine, Anjou, Touraine, Sologne, the upper part of Poitou, Berry, Angoumois, are of this character. The S. W. part of the kingdom from Auch to Bayonne is indifferent; but the plain of the Garonne and its branches, from Limosin S. even to the Pyrenees, has a deep, mellow, friable, sandy loam, with sufficient moisture for any culture: much of it is calcareous. The east provinces, Champagne, Lorraine, Franche Compte, Bresse, Dauphine, and Provence are calcareous, but less uniformly rich than the northern. Lower Poitou, and Alsace, are eminently fertile. The tract between the Mediterranean and the Cevennes mountains, is of the same description.

The cultivation of the vine has this advantage, that the farmer can draw from poor and otherwise barren hills and rocks, as great a profit, as from the richest vallies. In the maize and olive climates, a second crop, either of maize, millet, or buckwheat, always follows the wheat harvest. The agriculture of France is greatly behind that of England. About one third of the country is divided into little farms, too small to support their proprietors.

Rivers.] The Rhine, till lately a boundary of France, but, since the annexation of Holland, running for a considerable extent through it, has already been described. Of the other rivers there are four of considerable size; the Seine, the Loire, the Garonne and the Rhone.

The Loire, *Liger*, rises from Mont Gerbier, one of the Cevennes, in the N. of ancient Languedoc. Its course is a little W. of N. to Orleans; and thence W. of S. to the ocean. Its whole length is upwards of 500 miles. The chief branch is the Allier, *Eleaver*.

The Rhone, *Rhodanus*, is a noble and rapid stream, rising in Mount Furca, about 5,400 feet above the sea. It winds about 90 miles westward, through the vale, called the Vallais, and enters the Geneva lake near its eastern extremity. From the western

end its course is S. W. to Lyons, where it receives the Saone, *Arar*, a remarkably sluggish stream, from the Vosges. Its direction is S. from Lyons to the Gulf of Lyons, which it enters by several mouths. A little below Avignon it is joined by the Durance, *Druentia*, a very rapid and strong stream from the Alps. Its length exceeds 400 miles.

The Garonne, *Garumna*, rises in the valley of Arau in the Pyrenees, and runs N. W. to the bay of Biscay. About 12 miles below Bourdeaux it is joined by the Dordogne, *Duranius*, from the N. E. and, for the remainder of its course, about 28 miles, it is called the Gironde. Its banks are not distinguished for their beauty. Its length is 300 miles. The canal of Languedoc connects it with the Aude.

The Seine, *Sequana*, is of about equal length with the Garonne. Rising near Saint Seine, it runs in a N. W. direction to the English channel, and is the most beautiful stream in France. Its chief tributary, the Marne, *Matrona*, joins it at Charenton.

The Moselle, the Meuse, and the Scheld, have been described. The Somme, *Samera*, runs by Amiens and Abbeville to the English channel. The Adour empties below Bayonne. The Var falls into the Mediterranean about 4 miles west of Nice. It was formerly a boundary of France.

Lakes.] A few small lakes occur in Provence, and perhaps in some of the other provinces, but only adapted to the minute description of the topographer, France and Spain being singularly deficient in this pleasing feature of landscape.

Mountains.] Before proceeding to the grand chain of mountains in the S. of France, it may be proper briefly to mention a few mountainous tracts in the north. Those of Brittany are granitic, but of small elevation. They divide into branches towards Brest and Alençon. The Vosges, in the department of that name, in the S. of ancient Lorrain, are supposed to be connected with the mountains of Switzerland.*

Mont Jura, a vanguard of the Alps, forms a boundary between France and Switzerland. If Mont Blanc be admitted among the French mountains, the other Alps cannot rival its supreme elevation. The ancient province of Dauphiné displays several Alpine branches, which also extend through great part of Provence.

The grand chain of the Cevennes seems to run from N. to S. and to send out branches towards the E. and W. In the modern departments of the upper Loire and Cantal, are appearances which, in the opinion of eminent naturalists, indicate ancient volcanoes; but as these supposed appearances consist chiefly of basaltic columns, and elevations, the subject remains dubious. The northern part of the chain is styled the Puy de Dome, while the southern is called that of Cantal.† The Monts D'Or form the centre, and are the highest mountains in France. The chief elevation is that of the Puy de Sansi, which rises about 6,300 feet.

* Lameth. Theo. de la Terre, iv. 38*i.*

† Voy. dans les départ. Cantal, p. 5.

above the level of the sea, while the Puy de Dome is about 5000, and the Plomb du Cantal, the highest of that part, is about 6,200 feet. Near the Puy de Sansi is the gigantic mountain l'Ango, and Ecorechade a shattered and wrecked elevation. The Plomb du Cantal is also accompanied by bold rivals, as the Puy de Griou, le Col-de Cabre, le Puy Mari, and the Violent. This enormous assemblage of rocks covers an extent of about 120 miles, and according to the French authors is chiefly basaltic. The Puy de Sansi is capped with almost perpetual snow, followed in the descent by naked rocks and ancient pines : from its side issues from two sources, the river Dordogne, and many picturesque cascades devolve amidst basaltic columns.* On the 23d of June, 1727, Pradines, a village on the slope of one of these mountains, was totally overwhelmed, the whole mountain with its basaltic columns rolling into the valley. The inhabitants were fortunately engaged in the celebration of midsummer eve, around a bonfire at some distance.† These mountains are in winter exposed to dreadful snowy hurricanes, called *acirs*, which in a few hours obliterate the ravines, and even the precipices, and descending to the paths and streets, confine the inhabitants to their dwellings till a communication can be opened with their neighbours, sometimes in the form of an arch under the vast mass of snow. Wretched the traveller who is thus overtaken. His path disappears, the precipice cannot be distinguished from the level ; if he stand he is chilled, and buried if he proceed ; his eye-sight fails amidst the snowy darkness ; his respiration is impeded ; his head becomes giddy, he falls and perishes. In summer, thunder storms are frequent and terrible, and accompanied with torrents of large hail, which destroy the fruits and flocks, which for six months pasture on the mountains, guarded by shepherds, who have temporary cabins of turf and reed, styled *barônes*.

The Pyrenees remain to be described. This vast chain, known and celebrated since the days of Herodotus, may be considered with equal justice as belonging either to France or to Spain ; but as the most productive and interesting parts are on the side of France, and her literati have exerted themselves in the description, while those of Spain have been silent, it seems at least equally proper to introduce the delineation here, which shall be chiefly derived from the recent accounts of Raymond and Lapeyrouse.‡ To the surprise of naturalists, the Pyrenees have been found to present calcareous appearances, and even shells and skeletons of animals, near or upon their highest summits, which are in the centre of the chain. Mont Perdu is considered as the highest elevation of the Pyrenees, ascending above the sea 1751 French toises, or about 11,000 feet English. Other noted heights are Marboré,

* Voy. dans les départ. Cantal, p. 13.

† Voy. dans les départ. Cantal, p. 24. One vast block of stone, 90 feet long and 26 thick, being too heavy to roll, sunk vertically, and the shock seemed an earthquake even at the distance of a league. Another mountain is said to have recently sunk and disappeared in the S. of France.

‡ Journal des Mines, No. 37, p. 35.

the pic de Midi, the Niege Veille, &c. The Pyrenean chain appears at a distance like a shaggy ridge, presenting the segment of a circle fronting France, and descending at each extremity till it disappear in the ocean and Mediterranean.* Thus at St. Jean de Luz only high hills appear, and in like manner on the east, beyond the summit Canigou, the elevations gradually diminish. The highest summits are crowned with perpetual snow. Blocks of granite are interspersed with vertical bands, argillaceous and calcareous, the latter primitive or secondary, and supplying the marbles of Campan and Antin, of beautiful red spotted with white, though the general mountain mass be grey. To the S. and W. the Pyrenees present nothing but dreadful sterility, but on the N. and E. the descent is more gradual, and affords frequent woods and pastures. Besides the dreadful fall of rocks, undermined by the waters, they are exposed to Lavanges, or the impetuous descent of vast masses of snow, called Avalanches in Switzerland, and have their glaciers and other terrific features of the Alps.

According to Raymond† the very summit of mount Perdu abounds with marine spoils. This mountain is of very difficult access, as the calcareous rock often assumes the form of perpendicular walls, from 100 to 600 feet in height ; and the snows, ice, and glaciers, increase the difficulty. Near the summit is a considerable lake, more than 9000 feet above the level of the sea, which throws its waters to the east into the Spanish valley of Beoussa. Mr. Townsend† observes, that the limestone and schistus feed the vegetation on the N. of the Pyrenees, while the south is barren and consists of granite ; though mountains are generally barren and precipitous on the S. and W. because the most violent rains and tempests come from those regions.

Forests.] The forests of France are numerous and extensive ; and as wood is the general fuel, attention to their growth becomes indispensable. Two of the most remarkable are those of Orleans and Ardennes, the former for extent and the numerous troops of banditti who used to infest its precincts ; the latter for ancient fame and events of chivalry. The forest of Ardennes extended from Rheims to Tournay, and on the N. E. to Sedan in the present department of the Ardennes. To these names might be added the forest of Fontainbleau, and many others, which it would be superfluous to enumerate.

Botany.] The country which produces in full and equal perfection wheat and apples, maize and grapes, oranges and olives, the oak and the myrtle, must doubtless exceed all other European countries of equal extent in the variety and richness of its vegetable treasures.

Of the compound flowers the lavender cotton, and common southern wood, are plentiful on the rocks of Dauphiné and Provence ; the alpine Cacalia abounds on the mountainous frontiers of Savoy and Piedmont, and a few esculent vegetables grow wild in

* Voy. dans les Dep. No. 67, p. 4.

† Journ. des Min. No. 46, p. 757.

‡ Spain, i. 89.

Languedoc and Provence, as the artichoke, the salsafy, and scorzonera.

The cucumber, the melon, the gourd, and other kindred genera, though cultivated largely and with great ease in the South, are yet natives of hotter climates ; only one of this family, the *Mordica elaterium*, *squirtng cucumber*, properly belongs to France ; it occurs in a truly wild state, on low loose rocks, in Provence and Languedoc.

Of the bulbiferous plants, the large branched Asphodel, a flower of great beauty, is by no means uncommon in Provence. The tawny day-lily, clustered hyacinth and spiked star of Bethlehem all are found in the Mediterranean provinces of France, as are also the orange, pompadore, and martagon lilies ; the white hellebore, *Narcissus* and *Jonquil*. The shore of Hieres is adorned by the sea daffodil, growing luxuriantly on the very beach : and on the lower cliffs of the Nicene and Genoese Alps, the gigantic *Agave*, *American aloe*, now naturalized to the soil and climate, raises its stem to the height of 20 or 30 feet, and looks down on every herbaceous plant of European origin.

Of the papilionaceous plants that are natives of this country, several deserve notice for their use or ornament. *Lathyrus tuberosus*, a vegetable of the pea kind, grows wild in Alsace, and is cultivated in many parts of France for its large esculent roots ; the great lupin, varying with blue, white, or flesh coloured blossoms ; and chick pea, are met with in the southern provinces growing spontaneously, but are more frequently cultivated in large fields as food both for cattle and man.

The broad leaved myrtle, grows with great luxuriance along the whole of the Mediterranean coast ; the Caper-bush, the laurel leaved and Montpellier cistus, three low shrubs of exquisite beauty, hang from the summits, or cluster round the sides of the low rocks about Toulon and Montpellier. In the same vicinity also are found the Provence rose, the pyracantha, and the pomegranate tree.

Zoology.] The horses of France do not appear to have been celebrated at any period ; and it is well known that the ancient monarchs were drawn to the national assemblies by oxen. Many English horses are in times of peace imported for the coach and saddle. The best native horses are, for draught, those of Normandy : for the saddle, those of the Limogin, which have been recently improved by crossing the breed with the Arabian, Turkish, and English.* But the greater number of horses in France consists of Bidets, small animals of little shew, but great utility. The cattle of Limoges, and some other provinces, are of a beautiful cream colour. The sheep are ill managed, having in winter only straw, instead of green food as in England.† The consequences are poor fleeces, and rarity of sheep, so that the poor are forced to eat bread only, and large quantities of wool are imported. Of ferocious animals the most remarkable are the wild boar

* Young's France, ii. 55.

† Ibid. i. 430.

and the wolf ; the ibex and chamois are found on the Pyrenees and the Alps.

Mineralogy.] Gold mines anciently existed in the S. of France, and some of the rivulets still roll down particles of that metal. The ancient Gallic coins are however of a base gold mingled with silver, being the metal styled by the ancients electrum. There are silver mines at St. Marie-aux-Mines in Alsace, and at Gironmagny in the department of the Upper Rhine. The same district contains mines of copper, a metal not unfrequent in the departments of the Alps, and those of the Loire, the Lozere, and the Ardeche. The duchy of Deux Ponts, a valuable acquisition of France on the west of the Rhine, is celebrated for mines of quicksilver. The mountains which contain this metal embrace a district of ten or twelve leagues in length, S. to N. from Wolfstein to Cruznach, and seven or eight leagues in breadth, being of a reddish brown or grey sand-stone. In this territory among numerous mines of quicksilver, are those of Stahlberg, and Donnersberg, which have been explored for many centuries. The adjacent part of the Palatinat also contains similar mines, particularly in the mountain of Potsberg, and at Wolfstein. The annual product of these mines may be estimated at 67,200 pounds of mercury.* Two thirds of the lead of France are from Bretagne, particularly the mines of Poullaouen and Huelgoet ; mines of lead also occur in the maritime Alps, and in the mountains of Vosges, in the departments of Lozere, Ardéche, &c. &c. Antimony occurs in the Ardéche, in the department of the Allier, at Allemont in former Dauphiné, and in that of Mont Blanc. There are noted mines of calamine near Aix la Chapelle. Manganese occurs in the department of the Loire, and in that of the Vosges ; and at Romaneeche, in the department of the Saone, and Loire ; it is also found near Perigou, whence it used to be called pierre de Perigord : Cobalt is another product of Alsace. The new acquisitions in Savoy present some mercury ; and there is a mine at Menildot.

Iron, the most important and universal of metals, is found in abundance, particularly in some of the northern departments. In 1798 it was computed that there were 2000 furnaces, forges, &c. for the working of iron and steel.†

The coal mines of France were at the same time estimated at 400, constantly wrought ; and 200 more capable of being wrought. Of these coal mines many occur in the provinces which formerly belonged to Flanders, and in the departments of Boulogne, and La Manche. Coal is also not unfrequent in the centre and south of France. Nearly allied to coal is jet, an article formerly of great consumption, chiefly in Spain, where it was made into rosaries, crosses, buttons, for black dresses, &c.‡ France was from time immemorial in possession of this branch, which was center-

* *Journ. des Mlnes* xi. 43.

‡ *Ibid. Ann. iii. No. 4, p. 41.*

† *Ibid. Ann. vii. p. 171.*

ed in three villages in the department of the Aude, in the S. W. of ancient Languedoc.

Besides excellent freestone, the environs of Paris contain abundance of gypsum. Alum is found in considerable quantities at Aveyron. The Pyrenees in particular supply beautiful marbles.

Mineral Waters.] The chief mineral waters of France are those of Barrége, Bagnères, Vichi, and Plombières. The warm baths of Barrége, in particular, at the foot of the Pyrenees, have been long celebrated, and there the Queen of Navarre lays the scene of her tales. The baths of Bagnères are in the same neighbourhood.

Natural Curiosities.] Among the natural curiosities of France, the most worthy of notice is the plain of La Crau, which lies in Provence, not far from the mouth of the Rhone. This is the most singular stony desert that is to be found in France, or perhaps in Europe.* The diameter is about five leagues, and the contents from 20 to 25 square leagues, or about 150,000 English acres. It is entirely composed of shingle, or round gravel, some of the stones as large as the head of a man, and the shingle of the sea shore is not more barren of soil. Beneath is a small mixture of loam with fragments of stone. In the winter there are scattered piles of grass, which, from the vast extent of the space, pasture a considerable multitude of sheep. In general however France, being mostly a plain country, does not present much singularity of feature ; and the scenes of the Cevennes and Pyrenees have been little explored by travellers.

FRENCH ISLANDS.

Corsica, called by the Greeks *Calliste*, and afterwards *Cyrnus*, is 110 miles from the coast of Genoa, 55 from that of Etruria, and 11 from that of Sardinia. It lies between 41 11' and 42 54' N. ; and between 8 and 10 E. ; having the gulf of Genoa, N. ; the Tuscan sea, E. ; the straits of Bonifacio, S. ; and the Mediterranean, W. Its length, from cape Corso to the straits, is 106 miles ; its breadth varies from 50 to 40 ; and it contains according to Hassel 3,977 square miles. The first inhabitants were the Pheceans, from Ionia. The Carthaginians took it from them in the reign of Cyrus, B. C. 542 ; and retained it till B. C. 231, when it was captured by the Romans. The Goths subjugated it A. D. 553. The Saracens drove out the Goths, and they were succeeded by the Franks under Charles Martel, about 725. The island was soon ceded to the popes ; and the Genoese, after many unsuccessful efforts, at length subdued it, in the beginning of the 14th century. Their dominion was oppressive and insecure. The Corsicans often revolted ; and, at length, in 1736, elected Theodore, one of the noble family of Neuhoff, in Westphalia, their king. He failed, however, of success, and died a beggar in London. General Paoli was chosen chief of the island, in 1755. His measures were

* Young, i. 379.

GERMANY.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, BOUNDARIES, ORIGINAL POPULATION, ANCIENT DIVISIONS, PROGRESSIVE GEOGRAPHY, HISTORICAL GEOGRAPHY, ANTIQUITIES, RELIGION, LITERATURE AND UNIVERSITIES, GOVERNMENT, POPULATION, REVENUES, POLITICAL IMPORTANCE AND RELATIONS, FACE OF THE COUNTRY, RIVERS, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY.

THE geography of Germany has always been the most difficult of any country in Europe. It is subdivided into so many states, and these again into so many petty districts, each an independent principality, governed by its own laws and regulating its own police, that the geographer has found it impossible to be concise, without being defective ; minute without being tedious ; or either, without being obscure. The late changes have not relieved him from these difficulties.

Names.] The most ancient name of this country is said to have been *Teutschland*, from the *Teutones* or their god *Teuth*. The common people still call themselves *Teutschers*.* The Roman name was *Germania*. The French call the country *Alemagna* from the ancient *Alemanni*. The word *German* or *Garman* is said to be Celtic, and to signify a warlike man.*

Extent.] Germany anciently reached from the Rhine to beyond the Vistula, and from the Baltic to the Danube. Its modern breadth, from the Rhine to the eastern confines of Silesia, is 500 miles ; and its length, from the Isle of Rugen to the southern limits of Austria, is 600. The country south of the Danube, in the circle of Austria, is the ancient *Noricum* ; west of which lay *Rhettia* and *Vindelicia*.

Boundaries.] On the N. are Denmark, and the Baltic ; on the E. Prussia, Poland, Hungary, Sclavonia, and Croatia ; on the S. Italy and Switzerland ; and on the W. France, the Netherlands, Holland, and the German ocean.

Original Population.] The *Gelts*, the earliest occupants of Europe, appear to have settled principally in its southern regions. The *Cimbri*, one of the Celtic nations, appear, however, to have penetrated farther north. They occupied a large portion of the N. W. of Germany, and from them Jutland was called by the Romans *Cimbrica Chersonesus*. They were early the terror of Rome ; but in the time of Tacitus an inconsiderable people. The *Finns*, who followed them, went rather to the E. and the N. ; and appear never to have interfered with the Celtic tribes. Several of the Finnish nations in the time of Tacitus, particularly the *Estyi* or

* Adam's Ant. Geog. p. 555.

Esthes, occupied the N. E. parts of Germany; and the *Huns*, the only one of them that ever acquired extensive power, have long been settled on its eastern frontier. Both the Celts and the Finns however are obliged to yield to the invasion of the Goths or Scythians who migrated westward from their original seats on the Euxine, and had planted colonies in Germany, Britain, Gaul, and Spain long before the Roman interference in the affairs of those countries.

Ancient Divisions.] The tribes on the Rhine in the time of Tacitus were the *Calti* on the northwestern skirts of the Hercynian forest; the *Usipptii* and *Teucteri* lower down on the river, and the *Bructeri* near its mouth. North of its mouth lay the *Frisii*, in what is now Frieseland; the *Chauci*, an extensive tribe directly north, and also on the Baltic; and east of these last the *Cherusci* and the *Fossii*. The *Cimbri* were in what is now Holstein, and probably also on the southern bank of the Elbe.

The Generic name of *SUEVI* was given to the tribes lying between the Elbe and the Vistula. Their names were the *Semnones*, the *Longobardi*, the *Reudigni*, the *Aviones*, the *ANGLI*, who afterwards gave name to England, the *Varini*, the *Endoses*, the *Suardenses* and the *Nithones*.

The *Estyi* were on the S. E. of the Baltic. The *Peucini* and *Bastarnæ* lay east of the Vistula, but were ranked among the German tribes. The states of the Germans, on the banks of the Danube, were the *Hermundurii*, the *Narisci*, the *Marcomenori*, and the *Quadi*.*

On the decline of the Roman empire Germany was formed of 7 principal nations, the Franks, Swabians, Alemans, Frisians, Saxons, Thuringians, and Bavarians.

The emperor Maximilian grandfather, and predecessor of Charles V. divided Germany into 10 circles.

I. UPPER SAXONY.

- { 1. Pomerania
- 2. Electorate of Brandenburg
- 3. Electorate of Saxony
- 4. Thuringia
 - 1. Holstein (duchy of)
 - 2. Lawenburg (duchy of)
 - 3. Brunswick (duchy of)
 - 4. Electorate of Hanover
- 5. Luneburg
- 6. Bremen

II. LOWER SAXONY.

- 7. Mecklenberg (duchies of)
- 8. Hildesheim (bishopric of)
- 9. Magdeburg and Halberstadt (duchies of)

III. WESTPHALIA.

- { Divided into very many petty sovereignties

IV. UPPER RHINE.

- { Its petty sovereigns were styled *Landgraves*, *Counts* and *Dukes*

* Adam's Ant. Geog.

GERMANY.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, BOUNDARIES, ORIGINAL POPULATION, ANCIENT DIVISIONS, PROGRESSIVE GEOGRAPHY, HISTORICAL GEOGRAPHY, ANTIQUITIES, RELIGION, LITERATURE AND UNIVERSITIES, GOVERNMENT, POPULATION, REVENUES, POLITICAL IMPORTANCE AND RELATIONS, FACE OF THE COUNTRY, RIVERS, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY.

THE geography of Germany has always been the most difficult of any country in Europe. It is subdivided into so many states, and these again into so many petty districts, each an independent principality, governed by its own laws and regulating its own police, that the geographer has found it impossible to be concise, without being defective ; minute without being tedious ; or either, without being obscure. The late changes have not relieved him from these difficulties.

Names.] The most ancient name of this country is said to have been *Teutschland*, from the *Teutones* or their god *Teuth*. The common people still call themselves *Teutschers*.* The Roman name was *Germania*. The French call the country *Alemagna* from the ancient *Alemanni*. The word *German* or *Garman* is said to be Celtic, and to signify a warlike man.*

Extent.] Germany anciently reached from the Rhine to beyond the Vistula, and from the Baltic to the Danube. Its modern breadth, from the Rhine to the eastern confines of Silesia, is 500 miles ; and its length, from the Isle of Rugen to the southern limits of Austria, is 600. The country south of the Danube, in the circle of Austria, is the ancient *Noricum* ; west of which lay *Rhettia* and *Vindelicia*.

Boundaries.] On the N. are Denmark, and the Baltic ; on the E. Prussia, Poland, Hungary, Sclavonia, and Croatia ; on the S. Italy and Switzerland ; and on the W. France, the Netherlands, Holland, and the German ocean.

Original Population.] The *Gelts*, the earliest occupants of Europe, appear to have settled principally in its southern regions. The *Cimbri*, one of the Celtic nations, appear, however, to have penetrated farther north. They occupied a large portion of the N. W. of Germany, and from them Jutland was called by the Romans *Cimbrica Chersonesus*. They were early the terror of Rome ; but in the time of Tacitus an inconsiderable people. The *Finns*, who followed them, went rather to the E. and the N. ; and appear never to have interfered with the Celtic tribes. Several of the Finnish nations in the time of Tacitus, particularly the *Estyi* or

* Adam's Ant. Geog. p. 555.

Esthes, occupied the N. E. parts of Germany; and the *Huns*, the only one of them that ever acquired extensive power, have long been settled on its eastern frontier. Both the Celts and the Finns however are obliged to yield to the invasion of the Goths or Scythians who migrated westward from their original seats on the Euxine, and had planted colonies in Germany, Britain, Gaul, and Spain long before the Roman interference in the affairs of those countries.

Ancient Divisions.] The tribes on the Rhine in the time of Tacitus were the *Calti* on the northwestern skirts of the Hercynian forest; the *Usipitii* and *Teucteri* lower down on the river, and the *Bructeri* near its mouth. North of its mouth lay the *Frisii*, in what is now Frieseland; the *Chauci*, an extensive tribe directly north, and also on the Baltic; and east of these last the *Cherusci* and the *Fosseii*. The *Cimbri* were in what is now Holstein, and probably also on the southern bank of the Elbe.

The Generic name of *Suevi* was given to the tribes lying between the Elbe and the Vistula. Their names were the *Semnones*, the *Longobardi*, the *Reudigni*, the *Aviones*, the *Angli*, who afterwards gave name to England, the *Varini*, the *Endoses*, the *Suardenses* and the *Nuthones*.

The *Estyi* were on the S. E. of the Baltic. The *Peucini* and *Bastarnæ* lay east of the Vistula, but were ranked among the German tribes. The states of the Germans, on the banks of the Danube, were the *Hermundurii*, the *Narisci*, the *Marcomenori*, and the *Quadi*.*

On the decline of the Roman empire Germany was formed of 7 principal nations, the Franks, Swabians, Alemans, Frisians, Saxons, Thuringians, and Bavarians.

The emperor Maximilian grandfather, and predecessor of Charles V. divided Germany into 10 circles.

I. UPPER SAXONY.

- 1. Pomerania
- 2. Electorate of Brandenburg
- 3. Electorate of Saxony
- 4. Thuringia
- 1. Holstein (duchy of)
- 2. Lawenburg (duchy of)
- 3. Brunswick (duchy of)
- 4. Electorate of Hanover
- 5. Luneburg
- 6. Bremen
- 7. Mecklenberg (duchies of)
- 8. Hildesheim (bishopric of)
- 9. Magdeburg and Halberstadt (duchies of)

II. LOWER SAXONY.

- { Divided into very many petty sovereignties
- { Its petty sovereigns were styled *Landgraves*, *Counts* and *Dukes*

III. WESTPHALIA.

IV. UPPER RHINE.

* Adam's Ant. Geog.

V. LOWER RHINE, or the Electoral Circle.	{ Palatine Cologne Mentz Triers Subject to <i>Princes, Margraves, Bish-</i> <i>ops, &c.</i>	} Electorates of
VI. FRANCONIA.	{ Austria (archduchy of) Stiria Carinthia Carmiola Goritia Tyrol Brixin Trent	
VII. AUSTRIA.		

VIII. BAVARIA.

IX. SWABIA.

X. BURGUNDY.

{ Which comprehended Holland, the
Netherlands, and French Burgundy

Bohemia, Moravia, Lusatia, and Silesia are not comprised in the 10 circles except Burgundy, which was early dismembered. These circles remained with a few variations as they were originally formed, till the late dissolution of the Germanic empire. Since that event Germany has been formed into many states stiled independent; and actually so of each other. They are all members of what is called THE CONFEDERATION OF THE RHINE, and when the principles of that confederation are infringed are obliged to furnish, each their respective contingent of men and money to support them.

Progressive Geography.] The progressive geography of Germany, though an interesting topic, has never been ably illustrated. It appears that the central parts of Germany were little known to the ancients. The southern and western districts, as bordering on the Roman empire, had been partially explored. Roman ships had navigated the Baltic, and the Roman arms had penetrated nearly in a direction due east, to the nearest circuit of the Elbe near Magdeburg, in which quarter the trophies of Drusus were erected. On the south, the Sudetic mountains seem to bound the knowledge of the ancients; while through the centre of Germany, from the Rhine to the Vistula, extended the vast Hercinian forest.

The interior of this country remained unexplored till the age of Charlemagne, and the northern parts for some centuries after that period.

Historical Epochs.] 1. The state of savage independence, before Germany was known to the Romans. 2. The subjugation by the Roman arms, under Germanicus, A. D. 17. 3. The successful revolt from the Roman dominion in the reign of Domitian. 4. The conquest of Rome by the Heruli, who made Odoacer their general king of Italy. 5. The establishment of the empire, by Charlemagne king of France. He conquered both Italy and Germany and was crowned emperor of the west A. D. 800. 6. The

rejection of the Carlovinian line in 880, since which time Germany has been considered as an *elective* empire. After much contention Henry duke of Saxony was chosen in 918; and this line failing in 1024, was followed by that of Franconia. To this succeeded the line of Swabia. 7. The Interregnum after the death of Frederic II. which lasted 23 years. No less than six candidates claimed the empire, all of whom were destroyed. 8. The permanent annexation of the imperial dignity to the family of Austria in 1440. 9. The reign of Charles V. which was the period of the Reformation. 10. The dissolution of the Germanic body in 1809. Since that time the western and middle parts of Germany have been divided into many large and small kingdoms and principalities nominally independent and really so of each other, but actually under complete subjection to France. These now constitute what is called the CONFEDERATION OF THE RHINE.

Antiquities.] The antiquities of Germany consist chiefly of a few Roman remains in the S. and W. It would be endless to enumerate the churches founded by Charlemagne; or the numerous castles erected by powerful princes and barons.

Religion.] The religion of the greater part of Germany may be pronounced to be the Reformed, first introduced into Saxony by Luther. Yet the south continues firmly attached to the Roman Catholic faith, now chiefly supported by the house of Austria.

Literature and Universities.] The Germans can boast of a greater number of useful discoveries and inventions in arts and sciences, than any other European nation. They have the honor of discovering the Art of Printing about the year 1450. It would be easy to enumerate nearly one hundred of their inventions, without filling up the list with mere improvements in machines and mechanical arts. Literature and the sciences are arrived in Germany at a very high degree of eminence, both with respect to universality and solidity. Within these fifty years their improvements have been rapid and astonishing. Universal geography, chronology, antiquities and heraldry owe their perfection to the Germans, and the science of *Statistics* its origin. The German language has been greatly cultivated and enriched with many excellent compositions in all branches of polite and useful literature, which have been marked with the applause, and translated into the languages of neighboring nations. Many branches of useful knowledge, hitherto confined to particular classes of men, and difficult to be acquired, have been reduced to a scientific form in Germany; they form indispensable parts of polite education, and are publicly taught in the universities. The theory of trades and mechanical arts, the principles of private and public economy, of internal administration, and the science of finances; the knowledge of the political situation, resources and wealth of every state, have been added to the established list of academical sciences, and they employ the talents of a great number of writers, under the name of Technology, Economy, Science of Finances, and Statistics.

The number of readers in the German empire, and in the
VOL. II.

neighboring countries, especially in the north of Europe, where the German language has an extensive circulation, is large enough to encourage the publication of no less than 5000* annual literary productions, of which two thirds are original performances, and one third translations from other languages. The book trade is no where equally important ; at the Leipsick fair, books are sold and exchanged to the value of several hundred thousand dollars.

There are 38 universities in Germany, of which 19 belong to the Protestants, and 17 to the Roman Catholics ; though the latter ought to have many more, considering the proportion of their numbers to those of the Protestants, which is as two to one. Of all the German institutions of education, the universities are still the most faulty, considering the wants of our age ; yet most of the Protestant universities in Germany are the least exceptionable institutions of that kind in Europe. The number of literary and scientifical societies, public libraries, academies of arts, collections of pictures, military academies, &c. is greater in Germany than in any other country.

Government.] The government was that of an aristocracy, which elected a monarch, who may be of any family, Catholic, Lutheran, or Calvinist. To consider the constitution at length, which has been called by a German writer “a confusion supported by providence,” would be foreign to the nature of this work.—There is now no empire of Germany, nor are the states connected by any common bond.

Population.] The states composing the confederation of the Rhine have, according to Hassel, a population of 16,927,600 ; of whom 2,277,000 are in the duchy of Warsaw ; and 84,000 in the district of Dantzig. The remainder 14,566,600 are in Germany. Of the present Prussian population 5,584,000 are Germans ; and of that of Austria 8,660,000 : to which, if that of the duchy of Holstein be added, the whole amount of the population of Germany, will be, according to Hassel, 27,140,600.

Army.] The whole military force of the states composing the confederation of the Rhine, is stated, by Hassel, at 205,700 men, of whom they are obliged to furnish 116,750 men as a contingent to the French Empcror, the head of the confederacy, whenever its principles are infringed upon by other nations. What proportion of the Austrian, Prussian, and Danish troops is derived from Germany, we are unable to state.

Revenues.] The whole revenue of the confederation of the Rhine is stated by Hassel, at 94,193,000 guilders. The Austrian revenues derived from Germany are not less than 50,000,000 ; the Prussian 20,300,000, and those of Holstein about 1,300,000 ; making a total of 165,793,000 guilders annually yielded by Germany.

Political Importance and Relations.] The states which compose the confederation of the Rhine, are at present, entirely under the

* In the year 1792, “at the Easter fair, (there is another not so productive, at Michaelmas) were published 2227 new books, inclusive of 468 continuations, 194 new editions, and 154 translations ; most of them in the Belle Lettres, Geography, History and Physic.” [Professor Ebeling’s letter to the Author.]

control of the French Emperor, and have scarcely the independence of colonies. The weight which Prussia lately had in the politics of Europe is entirely gone ; and it is difficult to say whether the interests of Russia or France will predominate in her councils. Austria, though crippled by her two late contests, is still formidable. With a wiser monarch and an abler cabinet, she might soon, under the banners of the Arch Duke Charles, regain what she has lost.

The manners, customs, and dialects of Germany vary seriously in the different states. The Saxon is accounted the purest and most classical idiom of the German ; and the southern dialects of Suabia, Bavaria, and Austria the most uncouth. The literature will be best considered under each state. To style an author a German ; being almost as vague as to call him an European, so distinct are the several states, the dialects, and the shades of civilization.

Face of the Country.] To the north of the Mayn, Germany chiefly presents wide sandy plains, which seem as if they had been, in the first ages of the world, overwhelmed by the sea. A few hills begin to appear in the neighborhood of Minden ; and in the south of the Hanoverian dominions arise the most northern mountains of Germany, those of Blocksberg, and others in the Hartz. To the S. W. are the mountains of Hessia, and others, extending towards the Rhine : while on the east the rich and variegated country of Saxony, one of the most beautiful and fertile in the empire, extends to the southern limits of the mountains of Erzgeberg, abundant in mines and singular fossils.

The regions to the south of the Mayn may be regarded as rather mountainous.

Rivers.] Both portions are watered by numerous and important rivers. In the north the Elbe is the most distinguished stream, rising in the Sudetic mountains of Silesia ; and, after running south for about 50 miles, it suddenly assumes its destination of N. W. receives the Bohemian Muldo and Eger, the Mulda and Sala of Saxony, and the large river Havel from the east, and enters the sea near Cuxhaven, after a comparative course of more than 500 British miles. The chief cities on the banks of the Elbe are Dresden, Meissen, Whittenberg, Magdeburg, from which it runs almost a solitary stream to Hamburg. The tide is perceived to the height of 22 miles ; and, when raised by the north wind, middle sized vessels may arrive at Hamburg, but they are in general obliged to anchor a mile below the city.*

Not far to the west is the mouth of the Weser, which first receives that name when its two sources, the Werra and the Fulda, join near Munden in the principality of Calenburg, about 16 British miles S. W. of Gottingen. The Werra springs in the principality of Hildburghausen ; and the Fulda in the territories of the Bishopric so called ; the former having the longest course, and being justly considered as the chief source of the Wesser, which thus

* Busching, vi. 16.

flows about 270 British miles. The principal towns on this river are Bevern, Minden, and Bremen. The chief tributary stream is the Aller, from the duchy of Brunswick. The inundations of the Weser are terrible, the adjacent towns and villages seeming to form islands in the sea : hence the shores are esteemed unhealthy.

The sources and mouths of the Rhine have been already described. This noble river forms the grand ancient barrier between France and Germany ; and its course may be computed at about 600 British miles. On the German side it is diversified with mountains and rocks ; but from Basel to Spire the shores are flat and uninteresting.* Near Mentz they become rich, variegated, and grand ; and on the confluence with the Mayn the waters are distinguishable for many leagues. The Rhinegau is not only celebrated for its wines, but for the romantic appearance of the country, the river running through wild rocks crowned with majestic castles. Hence as far as Bonn the shores abound with beautiful and striking objects, the Rhine not seeming to assume his grandeur till after his junction with the Mayn.

The Danube has already been described. Its chief tributaries in Germany, are the Iler, the Lech, the Iser and the Inn from the S. and the Naab from the N.

The Necker is a tributary stream of the Rhine, rising in the Black Forest, not far from the Danube, and running a picturesque course of about 150 British miles through a country variegated with vineyards. Another and grander tributary stream of the Rhine springs from the lake of Fitchel See, on the mountain of Fitchelberg, esteemed among the most elevated parts of Germany, as it gives source to four rivers running in various directions. This source is called the White Mayn ; while another source the Red Mayn, so called from the red clay through which it flows, rises near Hærnleinsreuth, in the principality of Bareuth. The Mayn, after receiving the Rednitz and other considerable streams, joins the Rhine to the S. of Mentz. The Mayn is a muddy stream, but abounds with trout, carp, and other fish. After pervading the rich bishoprics of Bamberg and Wurtzburg, and some territories of the See of Mentz, it waters the walls of Frankfort, formerly a city of celebrated trade ; and has recently acquired fresh importance from being considered by German politicians as a natural boundary between the power of Prussia in the N. of Germany, and that of Austria in the S.

Lakes.] To the north of the Mayn Germany presents few lakes, the largest being in the duchy of Mecklenburg, where the lake of Plau extends under various names about 25 British miles, in length, by 6 in breadth. In the more southern and Alpine regions, the Boden See, or lake of Constance, is the most distinguished expanse of water, already described under Switzerland. Next is the Chiem See in Upper Bavaria, about 14 British miles in length by five in breadth, sometimes largely styled the Sea of

* Gardner's Views on the Rhine.

Bavaria. That circle, like most mountainous countries, also contains many other lakes of smaller account.

Mountains.] The most northern mountains in Germany are those of the Hartz, called the Brocken or Blocksberg.* These mountains rise in the form of an amphitheatre, the highest being what is called the great Blocksberg. The river Ilse rises from the bottom; and other streams spring from the hills to the N. W. and to the E. the height of the great Brocken is 3021 feet; and of the little Brocken 2713.

In Westphalia there are some hills near Minden; and in the duchy of the same name, bordering on Hessa, are the mountains of Winterberg, Astenberg, Schlossberg, and others.† The Hessian territories may be regarded as generally mountainous, especially towards the north. Thence S. W. towards the Rhine are several considerable hills, among which may be mentioned those in the W. of Wetterau, and the seven hills near the Rhine almost opposite to Andernach; with the ridge of Heyrich which protects the vines of Rhinegau. To the east of Frankfort on the Mayn are the hilly forest of Spessart, with the metallic heights of Fulda and Henneberg.

But the most celebrated mountains, in that part of Germany which lies to the N. of the Mayn, are the Erzgeberg, or Metallic Mountains, which rise to the N. E. of the Fichtelberg, running between Bohemia and Saxony, but supplying both countries with silver, tin, and other metals. The Erzgeberg are not of remarkable height, yet contain much granite like those of the Hartz and Hessa; with gneiss, in which most of the Saxon and Bohemian mines are found. Granular limestone also appears; and in Upper Lusatia an entire mountain is found of siliceous schistus, while Flinzburg consists almost entirely of milk-white quartz.‡ Misnia contains mountains of pitchstone; and strata of hornblende. In Voigtländ, near Averbach, appears the famous topaz rock, consisting of pale topazes in hard lithomarga. Micaceous schistus and slate also form portions of the Saxon mountains; with large masses of trap and basalt. Those of Hessa and the Hartz present nearly the same substances: and a summit of the Meisner consists of basalt resting on coal. The metals will be considered in the account of each country.

Among the German mountains to the S. of the Mayn may first be named the Bergstrass, a ridge passing from near Manheim to the vicinity of Frankfort. On the east are the high hills of Odenwald. Farther to the S. are the mountains of Wurtemburg, rising both on the E. and W. of that extensive duchy. On the W. the mountains form a continuation of those of the Black Forest, the mount Abnoba of Tacitus, whence he justly derives the source of the Danube; and the Helvetian forest of Ptolemy. The mountains of the Black Forest, in German Schwartzwald, extend from near Neuenburg, in the territories of Wurtemburg south to the four forest towns on the Rhine.§ The southern part is called the

* Buschung, x. 251.

† Kirwan, Geol. Ess. 174-176

‡ Riesbeck, viii. 8, 9.

§ Buschung, viii. 481.

High, and the northern the Lower forest : the length being about 80 and the breadth 20 British miles. The eastern part, as usual, presents a gradual elevation ; while the western shews precipitous summits to the inhabitants of Baden and Alsace. The appellation seems to arise from the thick dark forests with which the ascents are clothed. A branch of the Black Mountains spreads E. from near Sulz on the Neckar towards the country of Oettingen, being more than 60 miles in length. This chain is called the Alb, and sometimes the Suabian Alps. The constituent parts of these extensive ridges have been little detailed ; but a great part is calcareous, as they supply excellent marbles. Near Fruedenstadt in the Black Mountains are mines of silver and copper.

The south east of this portion of Germany is bounded by the high mountains of Bavaria and Salzia or Salzburg ; being branches or continuations of the Swiss or Tyrolese Alps, but without general appellations. Those bordering on Tyrol are granite ; thence, as usual, argillaceous and calcareous in the lower parts.* Large pieces of grass-green quartz are found studded with red transparent garnets, and at Munich are worked into elegant snuff boxes. The Alps of Salzburg exceed in height the Carpathian chain or the Pyrenees, and only yield to the Swiss and Tyrolese Alps, the highest summits being computed at more than 10,000 feet above the sea.

Forests.] Considerable remains yet exist of the ancient forests which pervaded Germany. The German word *wald*, corresponding with the old English *weald*, denotes a forest. The chief of these appear always to have extended along the middle regions of Germany, from the N. W. towards the S. E. The Dromling-wald is to the north of Magdeburg ; but the Solinger-wald, the woody mountains of Hartz, the Lutten-wald, the wide forest of Thuringia, may be said to be connected with the ancient forests of Silesia, hence extending far to the E. through the centre of Poland and Russia. More to the south, in this part of Germany, are the Spessart forest, and others. In the portion south of the Mayn, the vast Black Forest, and the woods along the Alb, are continued by others in various parts of Bavaria. In general the passion among the grandees for the chase of the wild boar, and other pleasures of hunting, has contributed greatly to the preservation of the forests.

Botany.] As Spain is distinguished by its groves of cork trees and ilex, and Scandinavia by its fir woods, so is Germany remarkable for its deep and almost impenetrable forests of oak : not indeed that this is the invariable characteristic of the country, for in an empire of such great extent, and of so varied a surface, it must needs happen that the native vegetable productions on the shore of the German ocean should differ considerably from those in the Black Forest or on the frontiers of Tyrol. There is however on the whole more uniformity than might be expected, and though perhaps few plants are absolutely peculiar to Germany, yet the

* *Tour in Italy*, 329.

abundance of some species, and the absence of others, forms a striking feature in the natural history of the empire.

The lilac and syringa, are by no means of unfrequent occurrence in the hedges of the north of Germany ; the cornel, the sweet briar, and cinnamon rose, are also common. Of the smaller plants the principal are lesser honeywort, winter cherry, yellow and least star of Bethlehem, evening primrose, and coronilla varia.

The pastures and edges of woods afford several kinds of iris and gentian : a number of bulbous rooted plants, particularly snow-flake, narcissus and daffodil : two kinds of hyacinth, the muscari and racemosus, and branched asphodel.

The vegetables of the woods and groves may be divided into the shrubby and herbaceous ; to the first belong, besides the common forest trees and shrubs of England, branched elder ; Daphne cneorum, Mespilus Germanica, pendent rose ; Bladder Senna and laburnum. Of the latter the most worth notice are millet grass, asclepias vincetoxicum, lily of the valley, clustered hyacinth, martagon lily, fraxinella, baneberry, monkshood, green hellebore, and hepatica.

A few characteristic plants also are met with in the cultivated fields and vineyards, such as tournesol, blue pimpernel, and Carthusian pink.

Zoology.] The zoology of this western half of Germany corresponds so much with that of the Austrian and Prussian dominions, that little need be added. The German horses are generally more remarkable for weight than spirit. The German wild boar is of superior size ; and those of Westphalia are in particular estimation. In the N. of Germany the lynx is sometimes seen ; and the wolf is common in the south.

GERMANIC STATES.

HAD Germany been one empire under one monarch, its power would probably have rivalled that of any nation in Europe. Its territory is extensive, its soil every where fertile ; its population always numerous, and its wealth very great. With the Baltic for its northern frontier, the Atlantic for more than half of its western, and an opening on the Adriatic, its foreign commerce would only have been surpassed by that of England ; while its large and numerous rivers would have given life and circulation to its domestic industry. These advantages, added to its central situation, might easily have given it great, if not commanding influence over the powers of the continent. Germany however was for more than 2000 years composed of petty principalities, connected by no common bond, and united only against each other. It was the scene of more domestic jealousies and wars, than all the other countries of Europe ; jealousies excited by foreign intrigues, and wars directed by foreign cabinets. Nations inferior in population and in wealth, easily surpassed it in arms, and even its own subordinate states, safely resisted the strength of the empire. The constitution of the Germanic body, the only semblance of union be-

tween its various sovereignties, has lately been dissolved ; but its numerous divisions still remain ; and the same disunion will probably prevail, until its various states are united under a common government. Of these Austria and Prussia claim separate heads. The others will be described under the two following divisions.

GERMAN STATES NORTH OF THE MAYN.

SAXONY.

I. THE kingdom of Saxony is the most powerful state in this division of Germany. It is one of the modern kingdoms, having been merely an electorate, till the peace of Tilsit, when it received a large addition from Prussian Poland, called the Duchy of Warsaw. It now comprises 56,970 square miles, with a population of 4,363,000. The name Saxony is derived from the ancient nation of the Saxons ; who, in the middle ages, held the greatest part of the N. and W. of Germany, and extended themselves over Thuringia, towards the territories of the *Lusitzi*, a Slavonic tribe, which gave name to Lusitz, or Lusatia.

Saxony Proper, lies N. W. and N. of Bohemia and reaches from the head of the Weser, to that of the Oder. It is about 220 miles from E. to W. and 130 from N. to S. The kingdom comprises the following territories.

1. Old Saxony, containing 11,485 square miles, and 1,612,000 inhabitants, and divided into 11 counties.

Wittenburg	Erzegeberge	Naumburg
Thuringia	Voigtland	Querfurt
Meissen	Neustadt	Henneberg
Leipsic with Wurzen	Merseburg	

2. Margravate of Lausitz, or Lusatia, containing 4,915 square miles, and 474,000 inhabitants ; and divided into Upper Lusatia, and Lower Lusatia, with Korbus.

3. Duchy of Warsaw, containing 40,570 square miles, 2,277,000 inhabitants ; and divided into 6 departments.

Posen	Warsaw	Kalwary
New Silesia	Plock	Bromburg

This duchy is in the western part of Poland, and constitutes the great part of the acquisitions of Prussia, in the division of that kingdom. The possessions of Prussia entirely separate this duchy from Lusatia. The distance across, however, in the narrowest place, is not more than 40 miles. And in the treaty of Tilsit, a communication was stipulated for by means of a military road. The ancient dukes of Saxony sprung from the kings, who defended themselves with such valor against France. Otho III. duke of Saxony became emperor in 936, and resigned Saxony to the house of Stubenskorn or Billing, which ended in 1106 ; and soon after this potent dukedom passed by marriage to the house of Bavaria. In 1180 the eastern part of Saxony was assigned to Bernard of Ascania, the western half being given to the archbishop of Cologne. The house of Ascania ended with Albert III.

1422 ; and was followed by that of Misnia. Ernest and Albert, sons of Frederic II. divided the territories in 1485, and formed two branches bearing their names. The Ernestine branch of the house of Misnia ruled till 1547, when John Frederic was deposed by Charles V. and the electorate assigned to Maurice of the Albertine branch, in which it continues. In order to gain the crown of Poland, the vain wish of the Saxon electors, Frederic Augustus, 1697, abjured the protestant religion ; but neither he nor his successors have attempted to constrain the conscience of their subjects. The electorate suffered greatly by the invasion of the Prussians, in the war of seven years ; but has since continued the tranquil and flourishing seat of arts and sciences.

The religion of the electorate is the protestant, which was here introduced by Luther ; and there are two bishoprics, Merseberg and Naumburg. That of the duchy is the catholic. The government is, as usual among the German princes, nearly absolute, but conducted with moderation through different councils. Yet there are states general of nobles, clergy, and burgesses, commonly assembled every sixth year to regulate the taxation ; and the sovereign can issue no laws without their consent. The army is 65,000, of whom 30,000 are raised in the Duchy of Warsaw. The contingent of Saxony, as a member of the confederation of the Rhine, is 20,000 men. The revenue is stated by Hassel at 17,500,000 guilders, the expenditure at 16,750,000, and the debt at 35,000,000. The credit of Saxony has always been high.

The language and literature of Saxony are the most distinguished in all Germany, most of the writers who have refined the language having been born, or having resided in this country, as Gottshed, who first introduced a superior style, and many others. Leibnitz, Wolf, and other philosophers were also born or resided in Saxony ; among the artists may be named Mengs, Haffe, and Gluck. Leipzig is a celebrated mart of German literature. There are many schools, colleges, and academies ; among the latter, the mineralogic academy of Freyberg, instituted in 1765, is esteemed the leading school of that science. Dresden the capital is built on the Elbe where the Weissesitz falls into it. It is one of the handsomest towns in Europe, and is supposed to have been built in the 10th century. It contains 61 streets, 40 public schools, and 18 churches. In 1803 the population amounted to 49,094, and the dwelling-houses to 2,644.

Warsaw the former capital of Poland is built upon the Vistula, partly on a plain and partly on a gentle ascent rising from the river. The town is very extensive, and wears a melancholy appearance. The palaces are numerous and splendid, but the great body of the houses are mean wooden hovels. Population in 1803, 64,421 ; houses 3,578. 52 14, 23 N.

Leipzig stands on the Plisse, in a pleasant fertile plain. Its university, founded in 1409, has been one of the most celebrated in Europe. There are 8 Lutheran churches, 1 Calvinistic, and 1 Catholic. Three annual fairs are held here, and the commerce is

very extensive. Inhabitants, in 1801, 30,796 ; houses 1340. 51
20 15 N.

Naumburg lies near the Saale, and contains 1,070 houses and 12,000 inhabitants.

Posen or Posna, in the Duchy of Warsaw, is built on the Warta, a branch of the Oder, which empties at Custrin. It is well and compactly built, and enclosed with a double wall and a deep moat. Houses in 1803, 1,391 ; inhabitants 15,992. Thorn in the same Duchy, contained 8,371 inhabitants, in 1802, and 1,070 houses, and Kalisch 6,313 houses. Wittenberg, in Saxony, is much reduced ; its population in 1806, amounting to only 4,920. It was the residence of LUTHER.

The manufactures of Saxony are thread, linen, laces, ribbons, velvets, carpets, paper, colours derived from various minerals, glass, and porcelain of remarkable beauty, and various works in serpentine stone. The country is also rich in native products, both agricultural and mineral, and beautiful pearls are found in the Elster in shells about six inches long.* With such advantages Saxony maintains a considerable inland commerce ; and Leipzig is esteemed one of the chief trading towns of Germany.

The climate is so favorable that wine is made in Misnia. The face of the country, especially towards the south, is beautifully diversified with hill and dale ; and its richness between Meissen and Dresden is esteemed to rival that of the north of Italy. The land is well cultivated ; the products, all kinds of grain and vegetables, with hops, flax, hemp, tobacco, saffron, madder, &c.† Chief rivers, the Elbe, the Saal or Sala, the Mulda, the Pleisse, the Elster, with the Spree of Lusatia ; all except the Elbe and Sala, rising in the mountains between Saxony and Bohemia. The mountains are those of the Erzgeberg, already described in the general account of Germany ; and there are several small forests supplying fuel for the mines and domestic purposes. The botany and zoology are in general common with the rest of Germany ; but the mineralogy is as usual particular, and few countries can boast of such fossil opulence. The mines of Johngeorgenstadt produce silver, tin, bismuth, manganese, cobalt, wolfram, &c. The other mines are those of Freyberg, Annaberg, Ehrenfriedersdorf, Altenberg, Eibenstock, &c. producing silver, copper, lead, and other metals. At Schneckenstein, near Averbach in the Voigtland, appears the topaz rock, unique in its kind. The tia of Saxony is not only a rare product, but is excellent. Jet is also found ; and abundance of fine porcelain clay, with fuller's earth, marble, slate, serpentine, agates, and jasper. The annual product of the silver mines has been computed, in the German style, at four tons of gold or £40,000, and is thought to be rivalled by that of the cobalt converted into the blue pigment called smalt. The tin, copper, lead, and iron, are also very productive. Nor must coal and turf be forgotten among the mineral productions of this remarkable region.

* Busching, ix. 352.

† See Hoeck's Tables for minute particulars.

II. The next kingdom in size is that of Westphalia. It contains 15,120 square miles. Its situation is nearly central in this part of Germany. The Saale, and the Elbe, on the E. separate it from Saxony and Prussia. On the West it reaches to the Ems. It is formed out of the southern part of the circle of Lower Saxony, and the eastern part of the circle of Westphalia. It is divided into 8 departments, which are subdivided into 27 districts.

I. Elbe,	V. Oker,
1, Magdeburg	Brunswick
2, Newhalden	Helmstadt
3, Stendal	Hildesheim
4, Salzwedel	Goslar
II. Fulda,	VI. Saale,
1, Cassel	Halberstadt
2, Hoxter	Blankenburg
Paderborn	Hable
III. Harze,	VII. Werra,
Heiligenstadt	Marburg
Drudenstadt	Hersfield
Nordhausen	Eschwege
Osterode	VIII. Weser,
IV. Leine,	Osnaburg
Gottingen	Minden
Einbeck	Bielefeld
	Binteln

The departments are named from the rivers on which they lie. The kingdom, in 1807, contained 1,941,561 inhabitants, 202 cities, 81 market towns, 4,261 villages and hamlets, and 522,000 houses. The revenue is 14,430,502 guilders ; the expenditure the same ; and the debt 40,000,000 guilders. The army consists of 25,000 men ; viz. 20,000 infantry, 3,500 cavalry, and 1,500 artillery. Its contingent is 25,000 men.

Westphalia was formed into a kingdom immediately after the Treaty of Tilsit, in 1807. All the territories of Prussia, west of the Elbe, were allotted to it, together with various small principalities. Jerome Buonapartè was made king ; but, for reasons of state, resigned his kingdom in 1811.

Magdeburg, the capital, lies on the Elbe ; and is a large, beautiful, wealthy and strongly fortified city. It was a town of considerable size in the time of Charlemagne, and has often suffered severely in the civil wars of Germany. Its trade is extensive, and its manufactures numerous, particularly of woollens, silks, cottons, linen, stockings, hats, gloves, tobacco and snuff. In 1802 it contained 3,233 houses, and 32,013 inhabitants.

Cassel, in 51° 19', 20 N. is equally divided by the Fulda. It was the capital of the Landgrave of Hesse-Cassel before he was driven from his dominions. There are several manufactures of cloth and stuffs, hats, gold and silver lace, worsted and silk stockings, tobacco and porcelain. In 1800 it contained 1,228 houses, and 18,450 inhabitants.

Brunswick lies on the Ocker, and is said to have been built by Bruno, of Saxony, in 868. It contained in 1804, 2,845 houses, and 31,714 inhabitants. It was one of the Hanse Towns.

Hildesheim was also one of the Hanse Towns, and is an old-fashioned, irregular town, containing, in 1802, 2,300 houses, and 11,108 inhabitants.

Mulhausen on the Unstrutt, a branch of the Saale, had, in 1802, 1576 houses, and 9227 inhabitants.

Gottingen is in a spacious, fertile valley, on a branch of the Leine, and its university has been much celebrated, and was founded by George II. in 1734. The town contains 5 Lutheran churches, one Calvinistic, and a Catholic chapel. It had, in 1807, 969 houses, and 8914 inhabitants.

Osnaburg stands on the Hase, and is built and fortified in the ancient manner. It contained, in 1805, 1,250 houses and 8,240 inhabitants. Wolfenbuttel, in a low marshy situation on the Ocker, had, in 1803, 998 houses, and 7,126 inhabitants. Minden is celebrated for a battle fought on a heath, near it, in 1759, between Ferdinand of Brunswick, and the French. Houses in 1802, 1,132; Inhabitants 5,152. Paderborn. Houses 871. Inhabitants 4,752.

III. The Hanoverian States bound the kingdom of Westphalia, on the N. W. Since their subjugation by France, they have not been formed into a distinct government, but are merely colonies of that country. They consist of the following territories.

1, Principality of Kalenburg	5, Duchy of Bremen
2, Principality of Luneburg	6, Principality of Verden
3, Principality of Lauenburg	7, County of Hoya
4, District of Hadeln	8, County of Diepholz.

They extend in length from E. to W. about 180 miles, and from N. to S. 100. Their whole contents is 10,132 square miles, and their population 629,000. These are descendants of a branch of that great nation, called the *Ost-Fali*, or eastern Faliens; while another branch to the W. gave the name to Westphalia. Hanover, before its seizure by the French, was an electorate; and the kings of England, from the time of George I. had been, until that event, the Electors. The Electors sprang from the ancient Dukes of Brunswick. Bruno I. margrave of Saxony, A. D. 955, enlarged and embellished the city of Brunswick. In 1071 the emperor Henry IV. gave the duchy of Bavaria to Welph, son of Azo of Este, a powerful marquis in Italy, and of Cuniza, heiress of the first Welphs earls of Altorf in Suabia. His grandson, Henry duke of Bavaria, acquired Brunswick along with Saxony. In 1195 William, son of Henry the Lion, and of Matilda of England, acquired Luneburg: and his son Otho, 1213, was the first duke of Brunswick and Luneburg. His son Albert I. 1252, was surnamed the Great. Magnus II. 1368, was surnamed Torquatus, from a large chain which he wore. His son Bernard retained Luneburg; while Brunswick passed to Henry the second son, and continued in his descendants till 1634. The dukes of Luneburg acquired some small portions of adjacent territory. Henry, being

put to the ban of the empire in 1521, was succeeded by his son, who only assumed the title of duke of Zell, a style which continued till the reign of George William, 1665. In 1617, Christian duke of Zell obtained possession of Grubenhagen. In 1692 George William duke of Zell consented that the electorate, instituted in favor of his family, should be conferred on his younger brother, as he had no male heir. Ernest died in 1698, having married Sophia daughter of Elizabeth, daughter of James I. of England. He was succeeded by his son George Lewis, elector, 1698, and king of England, 1714.

The religion is the Lutheran. The government was conducted by a council of regency, and there were provincial states, though rarely summoned. The revenue is now 3,600,000 guilders, which is paid to the Treasury of France. The literature of this country has deserved considerable applause, since the institution of the university of Gottingen by George II : it was founded in 1734, and solemnly opened 1737. It is now in the kingdom of Westphalia. The chief city is Hanover, in the northern part of the principality of Calenburg, situated on the river Leine, amidst numerous gardens and villas. This city is first mentioned in the twelfth century ; and is slightly fortified, containing 2,194 houses and 21,360 inhabitants. In the new city, on the left of the Leine, is a library, particularly rich in books of history and politics. Verden, near the junction of Aller with the Weser, is of small account, but has recently sent some vessels to the Greenland fishery under the Hanoverian flag. Other towns are Luneberg, with 2,001 houses and 12,100 inhabitants. Zelle, with 1,121 houses and 7,847 inhabitants. Lauenburg, with 3,283 inhabitants. The manufactures and commerce of this electorate are pretty considerable, in metals from the Hartz, linen, cotton, some broad cloths, &c. The silver fabrics of Zelle are celebrated in Germany. The chief exports are metals, coarse linens, timber, peat, with some cattle and grain.

The aspect of the country is plain, partaking somewhat of the sandy nature of Brandenburg. The agricultural products are wheat, rye, barley, oats, peas, haricots, and pot-herbs of all kinds ; with abundance of potatoes, good fruits, flax, hemp, tobacco, madder, &c. Wood abounds both for fuel and architecture, and affords considerable quantities of tar and pitch. Bees are particularly attended to. Horses, cattle, and sheep are numerous. The chief river is the Elbe towards the north ; and the Weser and Leine on the west ; with the Aller and Ilmenau in the centre. Smaller streams are the Loha, the Lutter, the Fuse, with the Siber which pervades the Hartzwald in the south. There are a few small lakes, as that of Diepholtz, and Stinhudder ; but none equal in size to those in the adjacent province of Mecklenburg. The Hanoverian dominions contain many small forests, and woods. The mineralogy is rich, consisting of silver, copper, lead, iron, cobalt, zinc ; with marble, slate, coal, turf, and limestone, the last particularly from the hill of Kalkberg near Luneburg. Boracite is found in the Kalkberg.

IV. The House of Mecklenburg. The territories of this family lie between Hanover, on the S. W. and Swedish Pomerania on the N. E. The kingdom of Westphalia borders on the S. The country is divided in two duchies, that of Mecklenburg-Schwerin, and that of Mecklenburg-Strelitz. The former contains 7000 square miles, 290,000 inhabitants, furnishes a revenue of 1,800,000 guilders, and an army of 1,800 men; the latter contains 800 square miles, 66,000 inhabitants, and yields a revenue of 525,000 guilders. The contingent furnished by both is 1,900 men. The whole country is full of lakes, heaths, and marshes, and the soil being sandy, produces little except rye and oats. It was long possessed by the *Veneti* or *Wends*, being the farthest western settlement of that Slavonic nation, and the peasants remain in a state of servitude. The states consisting of nobility and burgesses are assembled yearly to regulate the taxation. The religion is the Lutheran, with six superintendents, and an university at Rostock. Rostock, the chief town, is built on a harbor formed by the mouth of the Warne. It has a university, founded in 1419. The town was built in 1030, and contained, in 1803, 2,308 houses, and 13,736 inhabitants. Its commerce is valuable. Schwerin is built on a beautiful lake, called Schwerin-Sea, through which runs the Elde. Inhabitants, 9,801. Houses, 984. Wismar, at the mouth of the Elde, is well fortified; contains 6 churches, 1000 houses and 6254 inhabitants. The manufactures are wool and tobacco. The exports partly by Lubeck and partly by Hamburg are grain, flax, hemp, hops, wax, honey, cattle, butter, cheese and timber. The ruling family descends from the old Venetic sovereigns. The branch of Mecklenburg-Strelitz began in the 17th century.

V. The Grand Duchy of Berg reaches from the Lahn to Holland and from the Rhine to the kingdom of Westphalia. It is composed of

- | | |
|-------------------------|------------------------------|
| 1, The Duchy of Berg | 5, The county of Lingen |
| 2, The Duchy of Cleves | 6, The county of Tecklenburg |
| 3, The Duchy of Munster | 7, The county of Dortmund, |
| 4, The county of Mark | beside several lordships. |

It contains 6,900 square miles, and 922,649 inhabitants, with a revenue of 3,994,000 guilders, an army of 8,000, and a contingent of 5,000.

VI. The Grand Duchy of Hesse consists of 1, The Principality of Starkenburg, which lies S. of the Mayn on the Rhine. 2, The Principality of Upper Hesse, and 3, The Duchy of Westphalia. It has the Grand Duchy of Wirzburg on the S. that of Berg on the W. the kingdom of Westphalia on the N. and that of Saxony on the E. It covers an extent of 4,380 square miles, has a population of 539,000, a revenue of 3,500,000 guilders, an army of 8,000, and a contingent of 5,000. Hesse was the seat of the ancient *Catti*. The present inhabitants, the *Hessi*, or Hessians, derive their name from the river Esse, a branch of the Fulda. The country is generally mountainous; but there are many pleasant vales, sometimes containing vineyards and fields fertile in corn and pastur-

age. There are a few manufactures of linen, cloths, hats, and stockings. The religion is the Lutheran. Darmstadt, in Starkenburg, is the capital, and contained, in 1805, 791 houses, and 11,350 inhabitants. Giessen, in Upper Hesse, contains 5,174. The Hessians have been much employed as mercenary soldiers, and were hired by the British in the American War.

VII. The House of Saxe. The territories of this family compose five duchies :

Saxe-Weimar	Saxe-Hildburghausen
Saxe-Gotha	Saxe-Coburg.
Saxe-Meinungen	

They lie between the Grand Duchy of Wurtzburg, on the S. and the House of Schwarzburg, on the N. and cover an extent of 3,045 square miles. The population is 438,000 ; revenues 3,226,000 guilders ; army 3,400 ; contingent 2,800 men. Gotha, the chief town, contained, in 1805, 1330 houses, and 12,400 inhabitants ; Altenburg, 1264 houses, and 9484 inhabitants ; Weimar, in 1808, 800 houses, and 8,500 inhabitants ; and Coburg 745 houses, and 7,096 inhabitants.

VIII. The Duchy of Oldenburg is divided into the districts of

Oldenburg	Wuhrden	Vechta
Delmenhorst	Ware	Kloppenburg
		and Wildeshausen,

and contains 2,165 square miles, and 140,000 inhabitants. It lies W. of the Weser, near its mouth, and lately belonged to Denmark. The soil is fertile in pasturage, and produces an excellent breed of horned cattle. Large and expensive dykes secure the shores from inundations. The revenue is 720,000 guilders, and the army 1000 men. Oldenburg, the capital, contained, in 1800, 625 houses and 4,500 inhabitants.

IX. The House of Nassau comprises the Duchy of Usingen and the principality of Weilburg, beside several petty lordships. It is situated near the mouth of the Mayn, and contains 2,270 square miles, and 272,000 inhabitants. The revenue is 1,757,000 guilders ; the army 3000 men, and the contingent 1680. The country is mountainous and covered with forests, yet not without fine arable and meadow lands. The reigning princes are descended from Otho, who lived in the 10th century. Wisbader contains only 3,500 inhabitants.

X. House of Anhalt. The territories of this family, one of the most illustrious in Germany, are the Duchies of Dessau, Bernburg, and Cothen, containing 1,052 square miles, and 124,000 inhabitants. The revenue is 1,190,000 guilders, and the contingent 800 men. The religion is Calvinism. The soil is good and fertile in grain. The mines yield lead, copper, silver, iron, and coal. Dessau lies on the Muldau, near its mouth, and contained, in 1802, 900 houses, 9,220 inhabitants, 2 Calvinistic and 2 Lutheran churches. Lat. 51, 49. Bernburg contains 646 houses and 4,844 inhabitants.

XI. The Duchy of Aremberg lies round the lower part of the

river Ems, comprising the counties of Recklinghausen and Meppen, and the lordship of Dulmen. It contains 1,107 square miles, and 59,000 inhabitants ; and yields a revenue of 300,000 guilders, and a contingent of 379 men. The town of Meppen, on the Ems, contains 3,000 inhabitants.

XII. The territories of the House of Schwarzburg, are the principalities of Sondershausen, and Rudolstadt. The extent is 986 square miles ; the population 114,000 ; the revenue 450,000 ; the contingent 650 men ; Sondershausen stands on the Unstrutt, and contains 4000 inhabitants ; Rudolstadt, a little farther S. contains 4,800.

XIII. The territories of the House of Lippe lie N. of Paderborn, and S. of the Weser, composing the principality of Detmold, and the county of Schauenburg, and containing 942 square miles, and 95,000 inhabitants. The revenue is 35,000 guilders ; the contingent 650 men.

XIV. The New Hanseatic League.

1. Hamburg	{ 132 square miles ; 119,000 inhabitants ; revenue 1,500,000 guilders ; contingent 1800 men.
2. Lubeck	{ 197 square miles ; 45,000 inhabitants ; revenue 400,000 guilders.
3. Bremen	{ 88 square miles ; 50,000 inhabitants ; revenue 400,000 guilders ; contingent 500 men.
Dantzic in Poland	{ 416 square miles ; 84,000 inhabitants ; revenue 700,000 guilders.

These territories were called by the French government, the New Hanseatic League, for want of a better name. Each district includes the city, and a part of the adjoining country.

Hamburg is the third city in Germany, and contained, in 1807, 7,904 houses and 102,000 inhabitants. It was fortified by Charlemagne A. D. 808. The Elbe is here, including the islands, near a mile broad. The houses are rather commodious than elegant, and there are few fine streets, the population being overcrowded on account of the fortifications, built in the old Dutch taste, with spacious ramparts, planted with trees. It is ruled by a senate of 37 persons, the form being aristocratic. The religion is Lutheran. There are considerable breweries, and works for refining sugar, with some manufactures of cloth. Formerly the trade chiefly consisted of linens, woollens, wine, sugar, coffee, spiceries, metals, tobacco, timber, leather, corn, dried fish, furs, &c. ; but at present it is the great mart of the commerce of the British isles with the continent. The bank was founded in 1619 ; and the numerous libraries do honor to the taste of the inhabitants. Its chief dependencies are the river of Alster, the bailliage of Ham, some isles and lowlands on the Elbe ; and, besides some districts acquired from Holstein, the bailliage of Ritzebuttel, on the north of the duchy of Bremen, including the port of Cuxhaven, and the isle called Neuwerk, situated opposite to that port.* It lies in 53° 34' 32" N.

* Busching, xi, 146—163.

Lubec stands on the Trave, a navigable river, emptying into the Baltic. It was one of the chief members of the old Hanseatic league. It contains 3300 houses, and 32,000 inhabitants. Lutheranism is the established religion. The town was built in 1144.

Bremen is on the Weser. It contains 5350 houses, and 42,000 inhabitants. The religion is Calvinism. The manufactures and trade are very considerable.

Dantzig stands on the Vistula four miles from the Baltic. It has generally been stiled the chief of the Hanse Towns, and so early as 997, was a large commercial town. It lately belonged to Prussia. In 1804, it contained 5355 houses, and 42,273 inhabitants. Here are 12 Lutheran churches, two Calvinistic, and one Roman catholic. The inhabitants are almost exclusively Germans. It is now occupied by a French garrison. From forty to fifty thousand hacts of corn are annually exported, also timber, wax, honey, hemp, flax, yarn, potash, cordials, and spruce beer. Its manufactures are brandy, woollen cloth, hardware, and refined sugar.

XV. The house of Salm. The territories of this family are north of the Lippe, on the frontiers of Holland, and are divided into the principalities of Salm-Salm, and Salm-Koburg. Extent 680 square miles; population 56,000; revenue 230,000 guilders; contingent 323 men.

XVI. The territories of the house of Reussen lie in the southern part of Upper Saxony, round the sources of the Saale, comprising the principalities of Graitz and Lobenstein, and the counties of Schleitz and Ebersdorf. Extent 560 square miles; inhabitants 82,000; revenue 420,000 guilders; contingent 450 men. Graitz on the Elster, a branch of the Saale, contains 566 houses, and 4500 inhabitants.

XVII. The principality of Waldeck, consisting of the lordship of Waldeck, and the county of Pyrmont, lies south of Paderborn, and west of Hesse, containing 475 square miles and 48,000 inhabitants. Its revenue is 375,000 guilders, and its contingent 400 men. The inhabitants are chiefly Lutherans.

XVIII. The principality of Isenberg lies N. E. of Francfort on the Mayn, comprising the counties of Birstein, Budingen, Wachtersbach, and Meerholz, and containing 251 square miles, and 43,000 inhabitants. Revenues 260,000 guilders; contingent 291 men.

Beside Hanover, already described, there are five other districts north of the Mayn, which are provinces of France. 1. Swedish Pomerania, including the island of Rugen, with Mecklenburg on the S. W. and Saxony on the S. It contains 1446 square miles, and 116,000 inhabitants. The contribution is 400,000 guilders. 2. The principality of Fulda, N. of Wurzburg, and E. of Isenburg; 712 square miles; 91,000 inhabitants; revenue, 600,000 guilders. 3. County of Hanau, E. of Frankfort on the Mayn. 482 square miles; 66,000 inhabitants; revenue 820,000 guilders. 4. Principality of Erfurt with Blackenheyn, in Thuringia; square miles 350; population 51,000; revenue 300,000 guilders. 5. County of Catzenelnbogen on the Rhine and the Mayn; square miles 137; inhabitants 18,000; revenue 80,000 guilders.

GERMANY SOUTH OF THE MAYN.

THERE are two kingdoms also in this part of Germany, both of recent origin ; but the smaller states are much less numerous than in the other.

I. The kingdom of Bavaria includes, not only the old electorate of Bavaria, but the principal part of Franconia, about one third of Swabia, and the whole of the Tyrol. Its length, from Schweinfurth on the Mayn, to the southern part of the Tyrol, is 300 miles. Its breadth, from above Ulm on the Danube to Passau, is 160 miles. It is bounded on the E. by Bohemia and Austria ; S. by Venice ; W. by Swisserland, the grand duchy of Baden, and the kingdom of Wurtemburg ; N. by the Mayn, and by the principality of Bayreuth. It contains 35,870 square miles, and is divided into 15 circles which are named from the rivers on which they lie.

1. Mayn	6. Upper Danube	11. Salzach
2. Pegnitz	7. Lech	12. Iller
3. Naab	8. Regen	13. Inn
4. Rezat	9. Lower Danube	14. Eisak
5. Altmuhl	10. Iscr	15. Etsch

Bavaria is part of the *Rheta Vindelicia*, and *Noricum* of the ancients, and probably derived its name from the *Boii*, who first inhabited it. In the 6th century it became subject to the Austian kings, and was governed by dukes. In 889 Luitpold, the first duke of the Francic family assumed the style of king. His progeny extend to the present day, though interrupted in 946, when Berthold dying without issue, the emperor Otho gave Bavaria to his brother Henry of Saxony. In 1071 Welph son of Azo of Erte became duke of Bavaria, which, in 1138, passed to the house of Austria, and in 1154 reverted to the family of Welph, in the person of Henry the Lion. In 1180 it finally returned to the family of Luitpold, by the succession of Otho of Wittelbach.

The Palatinate, which belonged to Bavaria before the French revolution, lies on both sides of the Rhine. The western half is now incorporated with France, the eastern is a part of the grand duchy of Baden.

The population of Bavaria, in 1807, was 3,231,570 ; and the revenue in that year, 17,375,080 guilders. The debt, in 1808, was 80,000,000 guilders. The army, 28,820 infantry ; 5504 cavalry, and 1570 artillery : total, 35,894. The contingent 30,000 men. The established religion is the Roman catholic, with some Lutherans in the provinces, taken from Franconia and Swabia. The eastern part of Bavaria is plain and fertile. The western is mountainous and forested, and interspersed with large and small lakes. The Tyrol is almost made up of ranges of mountains, called the Tyrolese Alps. Their direction is N. E. and S. W. The greatest elevations rise to the N. of Stirzing, whence streams proceed towards the Inn, on the N. and the Adige on the S. The glacier of Stuben is 4692 feet above the ocean, the Brenner 5109, and the Gefron, the Tributaan and the Bock-kogo are still higher. On the highest mountains are found rubies and emeralds, and on

the lower, silver, copper, lead, mercury, iron, alum, and sulphur. The southern ranges are rich in wood and pasture, the northern bleak and barren. The chief rivers of this kingdom are the Danube, the Inn, the Iser, the Lech, the Nab, and, in the Tyrol, the Adige. The lake of Constance forms part of the western boundary.

Munich, the capital, stands upon the Iser, in 48° 8' 20" N. It is one of the handsomest cities in Germany, and lately contained 2270 houses, and 48,740 inhabitants. Here are manufactures of velvet, silk, wool, and tapestry. It was built about 1175.

Nuremberg contains 3284 houses, and 30,000 inhabitants. It stands on the Pegnitz, and is environed with double walls. It contains 17 churches. The town has long been celebrated for its toys.

Augsburg, between the Lech, and the Wertach, in 48° 21' 41" N. is in a fertile and delightful country, and is surrounded with ramparts, walls, and ditches. It contained, in 1807, 3680 houses, and 28,534 inhabitants.

Anspach, in 1801, contained 1007 houses, and 13,928 inhabitants. It lies on the Rezat, 13 miles from Nuremberg. Um lies on the Danube. The inhabitants are Lutherans. In 1803 they amounted to 11,289, and the houses to 1626.

Innspruck on the Inn, the capital of the Tyrol, contains 11,000 inhabitants.

Trent lies in a valley, on the Adige, in the southern part of the Tyrol. It is memorable for a grand council held there from 1545 to 1563. It contains 700 houses, and 7000 inhabitants, a cathedral, three parish churches, a college, and several convents.

Schweinfurt, on the Mayn, contains two churches, a hospital, and a college. Its trade is in cloth, linen, and feathers. It has 879 houses, and 6361 inhabitants.

Lindau stands on an island in the lake of Constance, connected with the main land by a bridge. The castle and the wall, are reckoned Roman works. The religion is Lutheran. The houses are 700 in number; the inhabitants 5176.

II. The kingdom of Wurtemburg, in the central part of Swabia, reaches from the Taxt, a branch of the Neckar, to within 20 miles of the lake of Constance, about 120 miles in length, and contains 7220 square miles. The kingdom of Bavaria lies on the E.; the same and the grand duchy of Baden, on the S.; that duchy on the W.; and the Iaixt and the Neckar on the N. There were earls of Wurtemburg in the 12th century; and in 1495 the ducal title was conferred on earl Everard. The present duke, like the electors of Saxony and Bavaria, received the empty title of royalty, and considerable additions to his territories, as a compensation for his want of fidelity to the empire, and for the loss of real independence. The population of the kingdom, in 1807, was 1,181,372; the revenue 8,000,000 guilders, and the debt 25,000,000. The army was 20,000 men, and the contingent 12,000. The kingdom is divided into 12 counties, Stutgard, Ludwigsburg, Heilbronn, Dehringen, Calw, Rothenburg, Rothweil, Urach, Ehingen,

Altdorf Schorndorf, and Elwangen. The soil is very fertile. The mountains of the Black Forest on the W. and those of the Alb on the E. and S. diversify the face of the country, and supply timber, fuel, and mines. Spelt is the chief grain, and some barley and wheat, with flax. Wine and cyder are made in considerable abundance. There are mines of silver at Freudenstadt, Konigs-wart, and Konigstein; and of copper at Guttach, near Hornberg. The religion is the Lutheran, with some Calvinists, and some colonies of the Vaudois. The church is ruled by four abbots and 38 deans. Education and ecclesiastical studies are favored by laudable institutions, particularly the seminaries of Tübingen and Stuttgart. This last is the chief town, and contained, in 1808, 2012 houses, and 22,680 inhabitants. The streets are large and straight, and the houses handsome. The town stands on the Nisenbach, two miles from the Neckar, and contains manufactories of stuffs, silk stockings, and ribbands. Tübingen had, in 1803, 700 houses, and 5765 inhabitants. It is a place of great antiquity, and stands in a valley on the Neckar. Heilbronn, the same year, contained 900 houses, and 5485 inhabitants. It is well built, contains three churches, two convents, a seminary, a library, and public baths.

III. The grand duchy of Baden, has the kingdoms of Wirtemberg and Bavaria on the E.; the lake of Constance and the Rhine, which divide it from Switzerland, on the S. the Rhine on the W. and on the N. by the principality of Stackenburg, in Hesse, and by the Mayn. It is every where narrow, except near its southern extremity; but its length exceeds 150 miles, and the number of square miles is 6030. The religion is the Lutheran. The population in 1807 was 922,649. In 1808, the revenue was 2,953,936 guilders, the expenditure 3,472,765; and the debt 18,000,000. The army contains 12,000 troops, and the contingent 8000. Manheim, the chief town, in 1800, had 1548 houses, and 18,818 inhabitants. It is on the Neckar near its mouth, and was formerly the capital of the Elector Palatine. It is strongly fortified.

Friburg stands on the Traisam, and contains 900 houses, and 7916 inhabitants. It is the seat of a university and contains 13 churches, and 10 convents.

IV. The grand duchy of Wurtzburg lies on both sides of the Mayn, and extends from the Pegnitz, westward to the limits of Baden, and from Mergentheim on the Tauber, northward to the territories of the house of Saxe. It contains 2126 square miles, and 311,000 inhabitants. The revenue, is 2,800,000 guilders. The debt, in 1802, was 3,954,730. The army is 2500 men, and the contingent 2000. Wurtzburg, the capital, is situated on the Mayn, and is well fortified, containing 1913 houses, and 21,380 inhabitants.

V. The United Principalities compose a state similar to the New Hanse-Towns, and consist of the Principalities of Ratisbon, on the Danube, in the heart of Bavaria, containing 90 square miles, 32,200 inhabitants, and Aschaffenburg on the Mayn, containing 460 square miles, and in 1802, 67,711 inhabitants; of the county of Wezlar on the Lahn, containing 11 square miles, and 4988 in-

habitants; and of the district of Frankfort on the Mayn, containing 88 square miles, and 52,000 inhabitants: besides three hereditary lordships on the north bank of the Mayn, near Aschaffenburg, containing 203 square miles, and 18,137 inhabitants. The whole revenue is 1,800,000 guilders; the army 1500 men.

The city of Ratisbon, on the Danube, is an ancient, large, well-built, and commercial town, and from 1662, till within a few years, was the seat of the diet of the empire. It exports large quantities of salt, corn, wood, and all kinds of provisions, to Vienna. It contains 1287 houses, and 22,000 inhabitants.

Frankfort-on-the-Mayn, so called to distinguish it from Frankfort-on-the-Oder, was anciently the residence of the kings of the Franks, and afterwards of the immediate successors of Charlemagne in the empire. Here the emperors of Germany have always been crowned. It is strongly fortified, contains 6 Lutheran churches, and 3 Roman catholic, a synagogue, 2997 houses, and 37,000 inhabitants. Two fairs are held here annually, and the trade is considerable.

VI. The little principality of Leyen, lies in Baden, on the Kintzig, near its entrance into the Rhine. Square miles 54. Inhabitants 4500; revenue 34,000 guilders; contingent, 29 men.

VII. The principality of Liechtenstein, containing the lordship of Vadutz and Schellenburg, lies on the Rhine, before its entrance into the lake of Constance. Square miles 54; inhabitants 5100; revenue 40,000 guilders; contingent 40 men.

Here ought also to be mentioned the principality of Bayreuth, or Culmbach, which lies north of Bavaria, between Wurtzburg and Bohemia, containing 1225 square miles, and 233,000 inhabitants; and yielding a tribute of 900,000 guilders. Bayreuth, the capital, contains 856 houses, and 10,000 inhabitants. Hoff, on the Saale, contained in 1792, 620 houses, and 4809 inhabitants. Culmbach, in 1800, 412 houses, and 2859 inhabitants.

AUSTRIA.

THE head of the house of Austria, was styled, till 1809, emperor of Germany, and king of Bohemia and Hungary. After the termination of the unfortunate campaign of that year, the constitution of the Germanic body was dissolved, and Francis II. not only lost a part of his own hereditary dominions; but also resigned the imperial crown of Germany. His remaining territories, however, were at that time formed into an empire, called the EMPIRE OF AUSTRIA; and, as its hereditary sovereign, he still possesses sufficient power to claim the third place among the sovereigns of the continent.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, BOUNDARIES, DIVISIONS, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, ANTIQUITIES, RELIGION, GOVERNMENT, LAWS, POPULATION, ARMY, NAVY, REVENUE, EXPENDITURE AND NATIONAL DEBT, MANNERS AND CUSTOMS, GYPSIES, LANGUAGE, LITERATURE, EDUCATION, UNIVERSITIES, CITIES AND TOWNS, EDIFICES, MANUFACTURES AND COMMERCE.

Names.] THE archduchy of Austria may be considered as belonging, in part to ancient *Pannonia*, the *Vindobona* of the Romans being the modern Vienna. But that half of Austria, which lies north of the Danube, was occupied by the *Quadi*, a barbaric nation, who anciently infested the adjoining provinces of *Pannonia* and *Noricum*; for the western part of Austria on the S. of the Danube, falls under the latter ancient appellation. The German name and division of *Osterich*,* or the eastern kingdom, softened into Austria by the Italian and French enunciation, arose after Charlemagne had established the western empire, being a remnant of the sovereignty of what was called eastern France, established by that conqueror. It was also styled *Marchia Orientalis*, the eastern march, or boundary: and after the failure of the Francic line became a marquisate feudatory to the dukes of Bavaria, till the emperor Frederic Barbarosa, in 1156, constituted it a duchy held immediately of the empire.† Hungary, a part of which belonged to ancient *Dacia*, derives its modern appellation from the Ugurs, a nation of Turkomanic or Tataric origin, who after spreading devastation through a great part of Germany, fixed their residence here in the 10th century. In the time of Charlemagne it was possessed by the Avars, a Slavonic people.‡ The Hungarians style themselves Magiar; and their language is a Finnic dialect. Bohemia, or the habitation of the *Boii*, was a central province of Barbaric Germany, afterwards seized by a Slavonic tribe, whose chiefs were originally styled dukes of Bohemia. Transylvania, and the Buckovina are parts of the province of *Dacia*, founded by Trajan. The former is by the Hungarians called Erdeli: by the Germans Sieben-burgen, or the Seven towns, from a colony there established; the more common name seems derived from the woody passes of the Carpathian mountains, and was imposed by the monkish writers.

Extent.] The length of Austria, from the eastern limits of Transylvania, to the western of Carinthia, is 620 miles; the breadth, from the Bug, which separates Galicia from the grand

* Several of the German names of Austrian provinces differ considerably from our appellations: Carinthia is *Carnten*; Carniola, *Krain*; Stiria, *Siegermark*; Croatia, *Crahaten*; Bohemia, *Bohmen*; Moravia, *Mæhren*. Galitz, or Galitzia is wrongly styled Galicia.

† D'Anville, *Etats formés en Europe*, p. 51.

‡ Gibbon, x. 204.

duchy of Warsaw, to the Save, the frontier of Turkey, is 520. The area is given in the table.

Boundaries.] Bounded on the W. by the kingdoms of Bavaria and Saxony; on the N. by Prussia and Saxony; on the E. by Russia; on the S. by Turkey, the Adriatic, Istria and Bavaria. Austria touches on the Adriatic in two places. The territory of Trieste has a little line of seacoast; and Carniola, east of Istria, has a greater extent.

Divisions.] The principal divisions of the Austrian dominions are,

	Sq. Miles.	Population.	Cities. Market Towns.	Villages.	Houses.
I. The AUSTRIAN HEREDITARY STATES,	69,541	8,660,000	484	981	3,370,700
1. Archduchy of Austria	16,635	1,979,200	57	357	11,063
2. Interior Austria	19,753	1,715,200	53	142	9,979
1. Styria	9,019	812,464	20	98	3,501
2. Carinthia	4,395	285,533	11	25	2,801
3. Carniola	5,112	409,054	1801	19	3,312
4. Austrian Friuli	1,165	103,000	2	1	341
5. Trieste	62	27,354	1	24	2,766
3. Bohemia	20,853	3,229,600	251	310	49,6985
4. Moravia	10,274	1,416,000	98	171	3,061
5. Austrian Silesia	1,826	320,000	25	1	576
II. GALICIA,	55,028	5,051,000	241	294	12,378
1. East Galicia	32,154	3,563,816	107	201	5,900
2. West Galicia, or Lodomiria	19,227	1,281,037	1801	93	6,438
3. The Bukovina	3,786	181,076	134	93	216,912
III. HUNGARIAN STATES,	127,041	9,859,000	84	722	16,540
1. Hungary Proper	87,421	7,030,000	55	617	9,310
		6,821,900 (In 1787)			1,019,727
2. Slavonia	6,240	470,500	5	26	887
3. Croatia	9,055	777,500	13	13	3,320
4. Transylvania	24,325	1,581,000	11	66	3,023
Total,	251,610	23,570,000	809	1997	65,202
					3,627,486

Austria also possessed, before the campaign of 1805,

	Square Miles.	Population.
1, The Tyrol,	10,154	620,854
2, Part of Bavaria {		77,971
E. of the Inn, }		
3, Part of Swabia,		293,433
4, Dalmatia,	7,230	296,415
5, Venetian territories,	9,349	1,630,179

The three first are now attached to Bavaria. Dalmatia and the territories of Venice, under the name of East Lombardy, form two great divisions of the kingdom of Italy. At the commencement of the French revolution Austria also possessed Lombardy, or the Duchies of Milan and Mantua ; and the Austrian Netherlands. These last are now an integral part of France. Milan and Mantua belong to the kingdom of Italy.

Original Population.] The original population of these extensive regions is various, but chiefly Gothic and Slavonic. The native ancient Germans, a Gothic race, form the ruling, most industrious, and most important part of the inhabitants. Bohemia and Moravia were originally Slavonic kingdoms ; the people of Poland may be referred to the same origin ; while those of Hungary are the largest of the Finnish tribes, and the only one that ever gained the rank of a kingdom. The Transylvanians are chiefly Slavonic. But a great number of Saxons are found in the large towns. The Croats and Slavonians are almost wholly of Slavonic origin. The number of Jews has been mentioned.

Progressive Geography.] The progressive geography of the southern part of the Austrian dominions commences at an early period. Yet the Adriatic was not a favorite sea of the Greeks ; and the Roman writers throw the first steady light upon these regions. Passing from Cisalpine Gaul in defiance of the barriers of the Rhætian, and Carnic, or Julian Alps, now the mountains of Tyrol, Carinthia, and Carniola, the Roman generals subdued many barbarous tribes ; and founded the provinces of Noricum and Pannonia, their most northern acquisitions in this quarter, till Trajan added Dacia. The Rhætians were subdued by Drusus in the reign of Augustus, under whose sway, or rather in the time of his successor Tiberius, Pannonia and Noricum also became provinces of the Roman empire. Concerning those regions much information may be derived from the luminous page of Tacitus ; and soon after, the geography of Ptolemy opens additional illustrations. The common resources of ancient geography are continued by the Byzantine writers ; and, after the age of Charlemagne, by many historians of the west. Since the invention of printing to the present period, the geography of these extensive provinces has been gradually improved, though not with the rapidity which might have been expected, as they unfortunately have not produced many men of acute genius, extensive learning, or exact science ; and the best accounts are derived from writers in the N. of Germany, and from foreign travellers.

Historical Epochs.] The historical epochs of various kingdoms

and states, recently united under one sovereignty, must of course be subdivided into their original distinct portions, beginning in the order above-mentioned, with the first important state, around which, as a nucleus, the others are conglomerated ; but proceeding thence to the other provinces, according to their modern extent and importance.

1. The house of Austria, which, by successive fortunate marriages since the fifteenth century, has arisen to such a summit of power, is well known to have sprung from the humble counts of Hapsburg. Those lords possessed a small territory in Switzerland, in the northern corner of the canton of Berne. On a lofty eminence, crowned with beech, stands an ancient tower, the first seat of the house of Austria. In 1273 Rodolph of Hapsburg was called to the Imperial throne, being at this time lord of the greater part of Switzerland ; by the extinction of the powerful house of Zaeringen, and that of the counts of Kyburg, whose joint inheritance devolving to Rodolph, became the basis of his power, and that of his successors.*

2. Another emperor of the house of Austria appeared in Albert, A. D. 1298 ; from whom the Swiss made their signal revolt in 1307. His son Frederic was obliged to yield the empire to Louis of Bavaria.

3. Albert II. duke of Austria, A. D. 1438, succeeded to three crowns, on the death of his father-in-law the emperor Sigismond ; those of Hungary and Bohemia by inheritance, and that of the empire by unanimous election.

4. Maximilian having married the heiress of Burgundy, the Netherlands became subject to the house of Austria in 1477 ; and his son Philip, in 1496, marrying the heiress of Arragon and Castile, the ample dominions of Spain fell afterwards under the Austrian sceptre. Charles V. inherited all these domains : but on his resignation, Spain and the Netherlands devolved to his son Philip II. ; and Austria, Bohemia, and Hungary, passed to Ferdinand the brother of Charles V. who was also chosen emperor of Germany.

5. The noted bigotry of the house of Austria was not confined to the Spanish branch ; for though Maximilian II. about 1570, had granted liberty of conscience even to the protestants of Austria, yet those of Bohemia, and other parts, were afterwards so much oppressed, that the protestant princes of Germany called in Gustaf Adolf, the celebrated Swedish monarch, to their assistance, who shook the empire to its very foundations. Even France supported the protestants, in the view of weakening the Austrian power ; and the war continued till 1648, when the famous treaty of Westphalia was signed, which has served as a basis for other diplomatic transactions.

6. The war with France was often rekindled during the long reign of Leopold I. 1658, to 1705 ; and in 1683 the Turks were so successful as to lay siege to Vienna.

* Planta's Swiss. i. 170.

7. His son Joseph I. joined the allies against France, and shared in their success. He married the daughter of John Frederic duke of Hanover.

8. By the death of the emperor Charles VI. on the 20th October, 1740, without male issue, the house of Austria became extinct. The elector of Bavaria seized the kingdom of Bohemia, and was elected emperor in 1742, but died in 1745.

9. Francis of Lorrain, son of Leopold duke of Lorrain, having married Maria Theresa, daughter of the emperor Charles VI. succeeded to the Austrian dominions, which continue to be held by his descendants. In 1745 he was elected emperor, and his successors have enjoyed the imperial crown, as if hereditary.

10. The reign of the emperor Joseph II. a beneficent but impetuous prince, whose grand designs of reformation were frustrated by his ignorance of the inveteracy of habits and prejudices, which must ever be considered in a due estimate of human affairs.

11. The formation of the Austrian States into an empire on the dissolution of the Germanic body in 1809.

Having thus briefly marked the chief epochs of the Austrian power, the events of the subject kingdoms and states must be as much compressed as possible. The next in importance are those of the kingdom of Hungary.

1. The Roman province of Dacia. The conquest by the Huns; and afterwards by the Avars, and other Slavonic tribes.

2. The conquest by the Ugrians,* who continued under dukes from their first settlement in 884.

3. St. Stephen king of Hungary, A. D. 1000. The crown is partly elective, and partly hereditary; and among the chief historical events are the wars in Dalmatia, against the Venetians.

4. Louis I. surnamed the great, A. D. 1342; subdues a great part of Dalmatia, and carries his arms into Italy. He was succeeded by his daughter Mary, who was styled King of Hungary; but dying 1392, the succession became controverted, and at last terminated in the election of Sigismond, marquis of Brandenburg, who had wedded Mary the heiress. In 1411 he was chosen emperor of Germany.

5. Albert of Austria having wedded Elizabeth the heiress of Sigismond, was, with her, crowned king and queen of Hungary, 1438: an event which forms the earliest basis of the Austrian claim to the Hungarian monarchy. Upon the death of Albert, Ladislas, king of Poland, is also chosen king of Hungary, but perishes in the battle of Werna against the Turks. The famous John Hunniades is appointed regent of the kingdom.

6. On the death of another Ladislas, the posthumous son of Albert of Austria, in 1457, the celebrated Mathias Corvinus, son of

* The Ugrians, as they are called by the Russians, or Madshares, as they call themselves, are the most numerous Finnish tribe, and constitute the chief part of the Hungarian population. Out of *Ugrians* the modern Europeans have made *Hungarians*. They are a totally distinct race from the Huns in language, appearance, and origin.

Hunniades, is proclaimed king of Hungary by the states, assembled in the plain of Rakos, near Pest. In 1485 he seized Vienna, and the other Austrian states, and retained them till his death in 1490. Mathias was the greatest prince who had ever held the Hungarian sceptre ; brave, prudent, generous, the friend of arts and letters, and a man of letters himself. He founded a magnificent library at Buda, and furnished it with the best Greek and Latin books, and many valuable manuscripts.

7. After repeated contests, the house of Austria again fills the throne of Hungary, in the person of Ferdinand, 1527, but towards the end of his reign the Turks seized on the greater part of this kingdom. On his being chosen emperor of Germany, Ferdinand retained the crown of Hungary till 1563, when he resigned it to his son Maximilian ; and it has since continued a constant appanage of the house of Austria.

Transylvania was a part of ancient *Dacia*. Trajan formed it into a Roman province. The Goths conquered it from the Romans. The Scythian Hunns, a Slavonic nation, next subdued it, and after them the Ugrians or Hungarians, the most powerful of the Finnish tribes. In 1004 it was first made a province of Hungary, and was governed by a waywode till 1526, when two rival princes, one the head of the Protestants, aided by the Turks, the other of the Catholics, assisted by the Emperor, made it for many years the seat of a civil war. In 1540 its connection with Hungary appears to have been wholly and finally dissolved. In 1694, Michael Abaffi, the last prince, yielded the sovereignty to the emperor ; and in 1699 Transylvania was confirmed as a Princedom to the House of Austria by the Turks. In 1722 it was changed from an elective to an hereditary principality.

Croatia was a part of the ancient *Illyricum*. The Slavi established themselves in it about 640. In the middle ages it formed a kingdom subject to the Constantinopolitan empire. In the eleventh century with Dalmatia it devolved to Hungary, and in 1540 was annexed with both to Austria.

Slavonia was also a part of ancient *Illyricum*, and is the only territory deriving its name from one of the largest aboriginal nations of Europe. The Slavi settled here about 640. In the middle ages it was possessed alternately by the Venetians and Hungarians. Solyma the magnificent took it from these last in 1540, and the Turks retained it till 1687 ; when it fell under the dominion of Austria.

The historical epochs of the kingdom of Bohemia deserve more attention.

1. In the seventh century the Slavons seizing on Bohemia were ruled by chiefs or dukes, seemingly hereditary, at least after Borzivoi, who embraced Christianity in the year 894. In the eleventh century Bretislas subdued the little adjacent kingdom of Moravia.

2. Vratislas duke of Bohemia is honored with the regal title by the emperor Henry IV. in 1086 ; who at the same time invested him with the domains of Lusatia, Moravia, and Silesia. But this dignity was personal ; and the constant title of king only

dates from Premislas II. in 1199. He and his immediate successors are styled Ottocari, from their zeal in the cause of the emperor Otto.

3. One of the most renowned monarchs was another Premislas Ottocar, who ascended the throne in 1253, seized Austria and Stiria, and other provinces to the south, and carried his arms into Prussia. In 1271 he refused the imperial crown, which was afterwards given to Rodolph count of Hapsburg.

4. The ancient lineage having failed, John count of Luxembourg, who had married a daughter of Bohemia, became king in 1310, and was slain at the battle of Creci, fighting against the English in 1346. His son and successor, Charles, was also emperor of Germany.

5. In the reign of Wenceslas VI. king of Bohemia, and emperor, John Huss having read the books of Wickliffe the English reformer, introduced his doctrines into Bohemia. He was condemned to the flames in 1415. The Bohemians and Moravians have since become remarkable for various sects of religion, and consequent intestine commotions. The Hussites under Ziska, repeatedly defeated the troops of their king Sigismond, brother of Wenceslas, and also emperor of Germany.

6. Albert of Austria, having wedded the daughter of Sigismond, received the crowns of Bohemia and Hungary. But the succession was afterwards controverted and infringed by George Podiebrad, (a Hussite chief, who obtained from the weakness of the emperor Frederic III. of the house of Austria, the crown of Bohemia in 1459,) by Vladislas son of the Polish monarch, and by Mathias king of Hungary.

7. Louis, son of Vladislas, succeeded his father in the kingdoms of Bohemia and Hungary ; but being slain at the battle of Mohatz, 1526, the crown finally passed to the house of Austria.

Antiquities.] The ancient monuments of the more northern kingdoms and provinces belonging to Austria, cannot be expected to be very numerous or important. Vindobona, and the adjacent parts of Noricum and Pannonia, occasionally display Roman remains ; but the ruins of the celebrated bridge of Trajan, over the Danube, belong to Turkey in Europe, being situated not far from Widin, in Bulgaria : it is supposed to have consisted of twenty arches, or rather vast piers of stone, originally supporting a wooden fabric of the length of more than 3,300 English feet. In Hungary, and other parts of the ancient province of Dacia, appear many relics of Roman power, as military roads, ruins, &c. and an elegant historian remarks, " that if we except Bohemia, Moravia, the northern skirts of Austria, and a part of Hungary between the Teyss and the Danube, all the other dominions of the house of Austria were situate within the limits of the Roman empire."* Hungary, and the other provinces of the Austrian dominions, having been frequently exposed to the ravages of war, many ancient monuments have perished ; yet several castles, churches, and

* Gibbon, vol. i. p. 22.

monasteries still attest the magnificence of the founders.* The cathedral church of St. Stephen, in Vienna, is a gothic fabric of singular pomp, and minute decoration.

Religion.] The established religion of the monarchy is the Roman Catholic. Formerly no others were tolerated. The later emperors have wisely encouraged the settlement of protestants. Various sects are extensively spread over Bohemia and Moravia; and Lutherans are found even in Vienna. In Hungary the Protestants and Greeks are thought to constitute a majority of the inhabitants; though the Catholic religion is also there established. In Transylvania Catholics, Lutherans, Calvinists, Socinians, Arians, Greeks, Mahometans, enjoy their several religions. The Mahometans are principally in the eastern parts. The Slavonians are zealous Catholics, though Greeks and Jews are tolerated. This is equally true of the Croatians.

Prague is an archbishopric, in Bohemia; and Presburg, Gran, and Cocolza, in Hungary. Konigsgratz is a bishopric in Bohemia; Olmutz in Moravia; Neusaz, Agria, Vesprin and Raab, in Hungary; Hermanstadt in Transylvania; Posega in Slavonia; and Agram in Croatia.

Government.] Austria was created a marquisate by Otho I. a duchy by Frederic Barbarossa, and an archduchy in 1477. In 1809, it was formed into an hereditary empire, with a power nearly absolute, vested in the sovereign. Bohemia is really an hereditary kingdom, of which the head of the House of Austria has been king since 1526. The States pretend to claim the right of election to the crown. No taxes can be raised without their consent, nor except when they are assembled; still they always grant the supplies proposed by the Imperial Commissioner. It is divided into 12 circles, in each of which are two head men, appointed annually for the administration of government.

Hungary also is a hereditary kingdom. The States composing the Diet consist of the prelates, barons, gentry, and burghers. These meet at Presburg. The king's representative is called the Palatine.

Transsylvania has its states, which meet at Hermanstadt. The prince's representative is called the Stadtholder.

Croatia and Slavonia constitute a viceroyalty.

The Transylvanians, Slavonians, and Croats, have always been characterized by a love of freedom, and an impatience of control; and the emperor has found his interest in letting them live in their own manner.

Laws.] The laws vary according to the different provinces, almost every state having its peculiar code. The Hungarians in particular have vigorously defended their ancient laws, though in many instances illaudable, the peasantry being in a state of villainage till 1785.† In 1786 Joseph II. after suppressing villainage in Bohemia and Moravia, extended the like freedom to Hungary; and this decree remains uncancelled, though many of the laws of

* Dr. Brown's Trav. part ii. p. 80.

† Townson, 102, 107.

that well-meaning, but injudicious, monarch expired with their author. Yet the boasted freedom of Hungary is rather that of a powerful aristocracy, than of the people at large. In general the laws may be regarded as mild and salutary ; and the Austrians in particular are a well regulated and contented people, while the Hungarians are often dissatisfied, and retain much of their ancient animosity against the Germans.

Population.] Hassel estimates the population of the Austrian dominions in 1809 at 23,570,000. The latest actual census is that of 1801, which gave the following results in the territories now belonging to Austria :

Christian families	4,284,408
Jewish do.	100,315
	————— 4,384,723
Male Christian subjects	10,795,189
Female do.	11,145,897
Strangers and Paupers	396,545
Jews	221,046
Jewesses	229,861
Duchy of Salzburg*	217,018
Army*	346,791
	————— 23,352,347

Of the male population 41,009 were clergy ; 258,912 nobility ; 26,998 officers of state ; 545,714 tradesmen ; 1,503,873 peasants ; 1,013,045 assistants of tradesmen and peasants ; 3,011,049 were boys under 12 years of age ; and 843,533 were boys between 12 and 17.

Army.] The Austrian army in 1809, is stated by Hassel as follows, viz.

Infantry, 81 regiments,	-	266,296
Cavalry, 35 regiments,	-	47,579
Artillery,	-	13,514
Engineer corps,	-	146
Miners, 4 companies,	-	420
Sappers, 4 do.	-	420
Pontonneers, 6 do.	-	629
Pioneers,	-	300
Sundry other corps,	-	17,000
Guards,	-	387
	—————	
		346,791

This army was under the command of 9 field marshals, 21 masters of ordnance, 11 generals of cavalry, 125 field marshal lieutenants, and 272 major generals. The Austrian army has varied as follows, under different emperors :

* The census of Salzburg, in the Archduchy, appears only to have been taken in the gross. As the army was not included, we have added it, as it was in 1809.

Ferdinand II. who flourished about 1630	150,000
Leopold I.	60,000
Afterwards	97,000
Joseph I.	130,000
Charles VI.	150,000
Maria Theresa	200,000
Joseph II.	364,000
Francis II.	496,000
Afterwards	346,000

Navy.] Austria has a few armed vessels in the harbor of Trieste, and a fleet of flat bottomed vessels on the Danube.

Revenue, Expenditure, and National Debt.] The amount of the ordinary revenue, in 1809, was 104,000,000 guilders; of which 19,000,000 were raised from the royal domains, 48,000,000 from the impost, and 37,000,000 from the land, poll, and circulation taxes. The royal domain, in 1803, were estimated at 350,000,000; and the ecclesiastical domains at 80,000,000.

This revenue, exclusive of that from the royal domains was proportioned nearly as follows: from the

Hereditary States	43,000,000
Galicia	18,000,000
Hungarian States	24,000,000
<hr/>	
	85,000,000

This sum is chiefly raised, as follows:

Mountains, salt, and mines	13,000,000
Post-office	1,800,000
Stamps	500,000
Tobacco	8,000,000
Lotteries	200,000
Tolls	24,000,000
Land tax	28,000,000
Poll tax	6,000,000

The extraordinary revenue is from 12 to 16,000,000.

The expenditure is from 105 to 110,000,000.

The sources of expenditure are stated by Hassel, as follows:

Court	6,500,000
Corps Diplomatique	800,000
Civil list	16,600,000
Privy purse	12,000,000
Public buildings	4,000,000
Pensions	2,600,000
Harbor of Trieste	60,000
Order of Theresia	126,000
Army	28,000,000
Interest of national debt	25,000,000
Other expenses	10,000,000
<hr/>	
	105,686,000

The national debt is estimated at from 1,200 to 1,600,000,000 including from 800 to 1,000,000,000 guilders in paper money, cap-

ble of being redecined at half its nominal value. The circulating specie amounts to from 100 to 120,000,000 guilders.

Manners and Customs.] Various are the manners and customs of the numerous kingdoms and provinces subject to the house of Austria. Vienna, the capital, presents as it were an assemblage of nations, in their various dresses. In Austria proper the people are much at their ease : and the farmers, and even peasantry, little inferior to those of England. Travellers have remarked the abundance of provisions at Vienna, and the consequent daily luxury of food, accompanied with great variety of wines. The Austrian manners are cold, but civil ; the women elegant, but devoid of mental accomplishments. The youth of rank are commonly ignorant, and of course haughty, being entire strangers to the cultivation of mind, and condescension of manners, to be found among the superior ranks of some other countries, a circumstance more striking to the English traveller in particular from the very great contrast. An Austrian nobleman or gentleman is never seen to read, and hence polite literature is almost unknown and uncultivated. In consequence of this ignorance the language remains unpolished ; and the Austrian speech is one of the meanest dialects of the German, so that polite people are constrained to use French. The lower orders are, however, little addicted to crimes or vices, and punishments are rare : robberies are seldom committed, and murder little known. When capital punishment becomes unavoidable, it is administered with great solemnity, and accompanied with public prayers, an example worthy of universal imitation.

The next people in estimation, and the first in numbers, are the Hungarians. Their manners are now considerably tinctured by those of the ruling Germans, but they remain a spirited people, and affect to despise their masters. Their dress consists of a tight vest, mantle, and furred cap, is graceful ; and the whiskers add a military ferocity to their appearance. The Transylvanians are a medley of several different nations, and are characterized by nothing but their savage manners, and their impatience of restraint. The Slavonians and Croatians are equally lawless.

Gypsies.] We ought, in this connection to mention a singular race of people, dispersed indeed over almost every country in Europe ; but found in great numbers in the Austrian dominions. The Gypsies made their first appearance in Germany, in the 16th century. Historians inform us, that, when Sultan Selim conquered Egypt, several of the natives, refusing to submit to the Turkish yoke, revolted under one *Zinganeus*, (whence the Turks call them *Zinganees*;) and agreed to disperse in small parties over the world. The French call them *Bohemians*. Mr. Grellman and Mr. Marsden consider them of Hindoo origin. They wander about in Asia ; in the interior of Africa ; and, like locusts, have overrun most European nations. Their whole number in Europe is believed to exceed seven hundred thousand. They are found in considerable numbers in Great Britain. The vigilance of the police has rendered them less numerous in France. In Spain they are

believed to amount to eighty thousand. They are somewhat numerous in Germany, Denmark, Sweden and Russia. In Italy they abound, particularly in the states of the church. But their chief population is in the S. E. parts of Europe, particularly in Hungary, Transylvania, and various parts of Turkey, which seems ever to have been the place of general rendezvous for the Gypsy tribes. England endeavoured to expel them in 1530; France in 1560; and Spain in 1591; but never with complete success.

For three centuries they have continued the same, wherever they have gone; unaltered by the lapse of time, the variation of climate, and the force of example. Their physiognomy, and their manners are equally singular in every country. Their swarthy complexion is the same in Africa, and in Europe. They acquire no additional laziness in Spain; and no new industry in England. Religion, powerful in its influence over most ignorant tribes, is here impotent; and the cross and the crescent are beheld with equal indifference. In the neighborhood of civilized life, they continue barbarous; and in the midst of cities and villages, they live in tents and holes of the earth, and wander from place to place as fugitives and vagabonds.

They are passionately fond of ornaments and of plate. Their principal occupations are smith's work, or tinker's, or wooden ware, and horse-dealing. In Hungary and Transylvania they are executioners, flayers of dead beasts, and washers of gold. The women, many of whom are addicted to prostitution, deal in old clothes, and fortune-telling. The majority of both sexes are lazy beggars, and thieves. They are fond of their children. Their diseases are the measles, smallpox, and weak eyes, occasioned by smoke. They live to an advanced age. Their remedies in sickness are saffron in their soups, and bleeding. The Austrian gypsies are particularly fond of cattle that die of any distemper; acting on the principle, "that the flesh of a beast, which God kills, must be better than that of one killed by man."

In Transylvania, they have a sort of regular government. Their chiefs are styled *Waywodes*, and are elected from the children of former chiefs. They have no sense of religion. They speak every where the language of the country; but have all one peculiar language, which is every where the same. Music is the only science of which they are fond.

Their train of thinking is childish; and the little reason, which they possess, is wholly devoted to the gratification of appetite. They are lively, loquacious, and chattering; fickle and inconstant; faithless and ungrateful; timid and servile; cruel and revengeful. They are excessively addicted to ardent spirits; and, what would hardly be expected, are universally vain. While they continue insensible of religion, all attempts to civilize will probably be ineffectual.

Language.] The languages spoken in these aggregated dominions are numerous and discrepant. They belong chiefly to three grand divisions, the *Gothic* or *German* of the ruling nation;

the *Slavonic* of the Poles,* part of the Hungarians, and also the ancient speech used in Bohemia and Moravia: and lastly the *Hungarian*, which is a branch of the Finnic. Among people of rank at Vienna, the French was formerly prevalent.

Literature.] The literary history of the Austrian dominions cannot ascend to a remote period. That of Austria proper in particular, is little interesting, and even the chronicles and lives of saints are comparatively recent. If the emperor Maximilian, grandfather of Charles V. be the author of an eccentric poem alluding to the events of his own life, and usually ascribed to him, though many assign it to his chaplain, he may be considered as the father of Austrian literature, as well as of Austrian greatness. But the succession of authors is interrupted; and many of those who flourished at Vienna were aliens. In the medical branch, Van Swieten, Storck, and others have acquired deserved celebrity.

Bohemia and Hungary have no ancient claims to literature. Cosmas of Prague, a venerable historian, flourished about the year

130; and Hungary has a contemporary father of history in the anonymous notary of king Bela.† The encouragement given to writers by the celebrated Mathias Corvinus little stimulated native literature. There is no Hungarian writer particularly celebrated among the modern Latin classics; nor is the native language yet known by any work commanding celebrity. Baron du Born, a native of Transylvania, has written many able works in natural history; but he used the Latin and French languages. The causes which have retarded the progress of letters and philosophy in the Austrian dominions are the coarseness of the German dialect, and the absence of the Slavonic and Hungarian from the learned languages of Europe; the military education of the nobility, and that metaphysical bigotry, which perverts their rational powers, and blights every bud of genius and solid knowledge.

Education.] The empress Theresa instituted schools for the education of children, but none for the education of teachers. Hence the children are taught metaphysics before they know Latin; and a blind veneration for the monks forms one of the first exertions of nascent reason. Yet the example is highly laudable, and with all its disadvantages may lead to important consequences.

Universities.] The universities, like those in other catholic countries, little promote the progress of solid knowledge. The sciences taught with the greatest care are precisely those which are of the smallest utility. The university of Vienna has, since the year 1752, been somewhat improved. It was founded in 1237, and that of Prague in 1347; that of Innspruck only dates from 1677, and Gratz from 1585. Hungary chiefly boasts of Buda, though the Jesuits instituted academies at Raab and Caschau. A late traveller† informs us that the university of Buda, by the Germans called Offen, possesses an income of about twenty thou-

* Nor is it disused in Bohemia, which may be regarded as the extreme western limit of the Slavonic tongue; for the people extend to the mouth of the Elbe.

† Katona, Hist. Crit. Hung. Proleg.

† Townson, p. 79.

sand pounds sterling, only four thousand of which are applied to pay the salaries of the professors. "Besides the usual chairs which exist in every university, there are those of natural history, botany, and economy. The collection of instruments for natural philosophy, and the models of machines, are good; and the museum of natural history, which contains the collection of the late professor Piller, besides that of the university may be ranked among the fine collections of Europe." There is a calvinist college or university at Debretzin: and the bishop of Erlau has recently established a splendid university at that city.

Cities and Towns.] Vienna, the chief city of the Austrian dominions, lies on the S. or rather W. side of the Danube, in a fertile plain watered by a branch of that river, (beyond which stands the suburb of Leopoldstadt,) and by the little river Wien. The Danube is here very wide, and contains several woody isles: the country towards the N. and E. is level, but on the S. and W. hilly, and variegated with trees. It is founded on the site of the ancient Vindobona; but was of little note till the 12th century, when it became the residence of the dukes of Austria, and was fortified in the manner of that age. The manufactures are little remarkable, though some inland commerce be transacted on the noble stream of the Danube. The number of inhabitants was in 1801, 232,049, and of houses, 6,649. The suburbs are far more extensive than the city, standing at a considerable distance from the walls. The houses are generally of brick covered with stucco, in a more durable manner than commonly practised in England; the finest sand being chosen, and the lime, after having been slacked, remaining for a twelvemonth, covered with sand and boards, before it is applied to the intended use. The chief edifices are the metropolitan church of St. Stephen, the imperial palace, library, and arsenal, the house of assembly for the states of lower Austria, the council house, the university, and some monasteries. The imperial park, is an island on the Danube well planted with wood; and to the S. is the chapel of Herenhartz, which during Lent is much frequented for the sake of amusement, as well as of devotion. Provisions of all kinds abound in Vienna, particularly wild boars, venison, and game. The people delight in the combats of wild beasts, and of bulls. In one of the suburbs is the palace of Belvedere, which formerly belonged to prince Eugene; and at the distance of a few miles stands Schonbrun, another imperial palace. Though Vienna be much exposed to the northern and eastern winds, yet the southern hills serve as a fence against the rain, and the traveller rather complains of dust than of moisture. The pleasantness of the environs in general is improved by the happy aspect of the Austrian peasantry.

The honor of the second city in the Austrian dominions must be claimed by Prague, the population being 80,817, and the houses 3,237. This metropolis of Bohemia stands on both sides of the river Mulda, over which there is a noble bridge of stone, founded in 1357. The fortifications are of small moment; but the houses are of stone, and commonly three stories in height. This city has

had the fatality of being exposed to frequent sieges, commonly fortunate to the aggressors. About a sixth part of the population consists of Jews.

The third city is Lemberg, or Leopold, in Gallicia. Its situation is low on the banks of the Peltew just above its entrance into the Bug, being surrounded with hills and mountains, which command the town. It was made an archbishopric's see, in 1361. The fortifications are in the Polish manner, merely of timber. The houses are 2850 in number ; and the inhabitants in 1808, were estimated at 50,000, being a mixture of several nations.

Next stands Gratz, the capital of Stiria, supposed to contain 40,000 souls, and 4600 houses. This city stands on the west side of the river Muehr, joined by a bridge to an extensive suburb on the opposite bank. There are regular fortifications ; and on a bold rock near the river is placed a strong citadel.

Pest is a royal and free town of Hungary on the east side of the Danube, opposite Buda, 103 miles S. E. of Vienna. It has suffered much in the wars with the Turks. The supreme court of appeal is held here. The town contains a large military hospital, 6 convents, several churches, and in 1807, 2909 houses, and 36,000 inhabitants.

Debretzin, also in Hungary, stands on a branch of the Theis in 47° 30' N. Its houses in 1806 amounted to 3600 and its inhabitants to 35,000.

Presburg, the capital of Hungary, only contains 32,000 inhabitants, its precedence being of modern date, after Buda the ancient capital had been repeatedly taken by the Turks. Presburg is beautifully situated on the Danube, towards the western extremity of Hungary, being only about 35 British miles to the east of Vienna ; but the position is still more uncentral than that of Buda. The Danube is here very rapid, and about 250 yards in breadth. About one quarter of the inhabitants are Lutherans, who are so opulent as to pay about one half the taxes. A good theatre, and convenient coffee-houses contribute to the pleasure of the inhabitants. Jews also abound in this city.

Theresienstadt in lat. 46° 6' N. stands near a branch of the Theis, and contains about 2380 houses, and 28,000 inhabitants.

Szegedin is built near the confluence of the Maros and the Theis, and is well fortified. Its trade is chiefly in cattle. In 1808 it contained 25,347 inhabitants.

Cracow, in Gallicia, the ancient capital of Poland, stands on the Vistula, near its source. It has a castle, but is weakly fortified. In 1808, its houses amounted to 1,992, and the inhabitants to about 25,000.

Buda, by the Germans called Offen, the ancient metropolis of Hungary, contained, in 1787, 1,640 houses, and 24,872 inhabitants. Here are hot-springs of some celebrity. The people, like those of Vienna, delight in bull-fights and exhibitions of wild beasts. In 1784 the seat of the provincial government was transferred from Presburg to this place.

Brunn, the capital of Moravia, is built at the conflux of the

Schwarsaw and the Surtawa, tributaries of the Danube. It has considerable manufactures of cloth, velvets and plush. The diets are held alternately at Brunn and at Olmutz. It is defended by a strong fortress, has 6 cloisters, a collegiate church, and a college of Jesuits, and in 1801 contained 1,621 houses, and 23,598 inhabitants.

Trieste lies on the N. E. part of the Adriatic, called the gulf of Trieste. The harbor is well fortified, and the trade considerable. It contained, in 1801, 23,633 inhabitants, and only 1,210 houses.

Schemnitz, the largest of the mine-towns in Hungary, lies between hills, in a long valley. The houses, 1692 in number, stand scattered a considerable way up the acclivities on both sides. The inhabitants are 22,241 in number, of whom two thirds are Protestants.

Brody, on the confines of Russian Poland, was estimated to contain, in 1808, 21,000 inhabitants.

Laybach, in Carniola, on the Laybach, a branch of the Save, in 1808, contained, 1,394 houses, and 20,000 inhabitants.

Linz, or Lintz, lies on the Danube, in 14 E. and is a handsome, well built town. It is the capital of the province, west of the Enns, sometimes called Upper Austria, and in 1808 contained 998 houses, and 18,754 inhabitants.

Cronstadt is in the S. E. part of Transylvania near the borders of Walachia, from which it is separated by lofty mountains. It contains 2010 houses, and 18,118 inhabitants, consisting of Bulgarians, Hungarians and Saxons.

Erlau, in Hungary, in lat. 47° 53' N. lon. 20° 30' E. contained, in 1808, 15,942 inhabitants,

Salzburg, on the borders of Bavaria, contained, in 1805, 15,508 inhabitants.

Zomber, a little east of the Danube, in Hungary, near the confines of Turkey, contained, in 1808, 14,956 inhabitants.

Clausenburg, or Colosvar, in Transylvania, on the Samos, a tributary of the Theis, contains 1060 houses, and 14,522 inhabitants. This is the *Zeugma* of the ancients, and in Latin *Claudiopolis*. It is surrounded by an ancient thick wall, and is the principal seat of the Unitarians in Transylvania.

Miskolez, in Hungary, near the confines of Silesia, contains 2400 houses, and 13,500 inhabitants.

Hermanstadt in Transylvania, on the river Szeben, is fortified with a double wall, and a deep moat. It contained, in 1785, 13,313 inhabitants.

Neusatz, on the Danube, in Hungary, opposite the village of Peterwardein, in Slavonia, is a bishop's see, and well fortified. The inhabitants, who are Rascians, amounted, in 1808, to 13,262, and the houses to 2000.

Raab, or Györ, is a strong fortress of Hungary, 28 miles from Presburg, in a pleasant country, at the conflux of the Danube, the Raab, and the Rabnitz. Its houses, 1,610 in number, are all of stone. The population, in 1810, was 13,071.

Of the remaining towns none are so large as to demand a minute

description. In Bohemia, Reichenberg contains 10,500 inhabitants : in Moravia, Iglau, 10,948, Olmutz 8,595, Troppau 8000, Nickolsburg 7,520 : in the archduchy, Neustadt 10,680, Hallstadt 8000 : in Croatia, Agram, 8,900, Bukari 7,805, Fiume 11,000 : in Carinthia, St. André, 8,900, Klagenfurt, on the Drave, 11,000 : in Carniola, Goritz, 12,000 : in Slavonia, Semlin, 7,089 : in Gallicia, Jaroslaw, 12,000, Jaszbereny 12,000, Lublin 7,400 : in Hungary, Csaba 12,000, Eger 7,544, Eszeg 7,656, Furfkirchen 8,925, Cardszag, 9,000, Carlsburg 11,279, Kaschau 12,000, Comorn 12,067, Kremnitz 10,200, Fasarhely 8,500, Nagykoros 12,000, Oedenburg 12,319, Smolnitz 9,000, Stulweissenberg 12,248 : and in Transylvania Temeswar, 10,097.

Edifices.] The chief public edifices are at Vienna, Buda, and Pest, but there are many splendid churches and monasteries in the several regions of the Austrian dominions. Many of the Hungarian nobility, who have vast estates, possess castles of corresponding magnificence. Amongst the chief are the Palesy, Schaki, Erdoby, Sichy, Forgathese, Kohari, Karoly ; but above all Esterhazy, whose castle, about a day's journey from Presburg, is said to rival Versailles in pomp ; and seems also to rival that palace in the surrounding desolation, being in a morassy country near the Neusidler lake.*

Manufactures and Commerce.] Manufactures do not seem to be cultivated to a great extent in any part of the Austrian dominions. Vienna perhaps equals any other of the cities in manufactures, which are chiefly of silk, gold and silver lace, cloths, stuffs, stockings, linen, mirrors, porcelain ; with silver plate, and several articles in brass.† Bohemia is celebrated for beautiful glass and paper. The linen manufactures of Bohemia amount annually, according to Hoeck, to 16,000,000 florins, beside some in wool and in cotton. The woollen manufacture at Lintz, employs 30,000 persons ; and in the whole archduchy there are 7 great manufactures of cotton cloth, which employ 140,000 persons. But the commerce of the Austrian dominions chiefly depends upon their native opulence ; Austria proper and the southern provinces producing abundance of horses and cattle, corn, flax, saffron, and various wines, with several metals, particularly quicksilver from the mines of Idria. Bohemia and Moravia are also rich in oxen and sheep, corn, flax, and hemp ; in which they are rivalled by the dismembered provinces of Poland. The wide and marshy plains of Hungary often present excellent pasture for numerous herds of cattle ; and the more favored parts of that country produce corn, rice, the rich wines of Tokay, and tobacco of an exquisite flavor, with great and celebrated mines of various metals and minerals. The Austrian territories in general are so abundant in the various necessaries and luxuries of life, to be found either in the north or south of Europe, that the imports seem to be few and inconsiderable. The chief exports are from the port of Trieste, consisting of quicksilver and other metals, with wines

* Riesbeck, ii. 49, 66.

† Busching, vi. 549. See Hoeck.

and various native products. Dr. Townson gives a table of the exports of Hungary for one year, from which it appears that they consisted chiefly of cattle, hogs, sheep, flour, wheat, rye, wool, and wine, carried to other Austrian provinces ; and only about one-seventh part sent to foreign countries.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Climate and Seasons.] THE climate of Austria proper is commonly mild and salubrious, though sometimes exposed to violent winds, and the southern provinces in general enjoy delightful temperature, if the mountainous parts be excepted. The more northern regions of Bohemia and Moravia, with the late acquisitions in Poland, can likewise boast the maturity of the grape, and of gentle and favorable weather. The numerous lakes and morasses of Hungary, and the prodigious plains, are supposed to render the air damp and unwholesome, the cold of the night rivalling the heat of the day ; but the blasts from the Carpathian mountains seem in some measure to remedy these evils, the inhabitants being rather remarkable for health and vigor.

Face of the Country.] The appearance of the various regions subject to Austria is rather mountainous than level, presenting a striking contrast in this respect to those of Russia and Prussia. The Tyrolese Alps branch out on the S. and N. of Carinthia and Carniola. Stiria displays chains of considerable elevation. The southern limit of Austria proper is marked by other heights ; and Bohemia and Moravia are almost encircled by various mountains, which on the east join the vast Carpathian chain, that winds along the north and east of Hungary and Transylvania, divided from each other by another elevated ridge : the dismembered provinces of Poland, though in the south they partake of the Carpathian heights, yet afford the widest plains to be found within the limits of the Austrian power.

The general face of the Austrian dominions may be pronounced to be highly variegated and interesting ; and the vegetable products of both the north and south of Europe unite to please the eye of the traveller.

Soil and Agriculture.] The soil is upon the whole extremely fertile and productive, in spite of the neglect of industry, which has permitted many parts of Hungary, and of the Polish provinces, to pass into wide forests and marshes. The latter country, particularly in many places, exhibits few symptoms of an inhabited and still less of a civilized region. Were skill and labor to assume the axe and spade, those very parts might display the great-

AUSTRIA.

est exuberance of fertility. The state of agriculture in Moravia is superior to the rest, being improved by Flemish farmers.

The following is the estimate furnished by Hassel of the distribution of the Austrian territories.

	Square Jochs.
Ploughland	19,500,000
Pasture	9,200,000
Meadows	12,500,000
Gardens	2,501,000
Wine-mountains	1,250,000
Water	1,500,000
Forests	28,407,500
	78,858,500

The *square joch* appears to be a very little more than two acres.

Rivers.] After the Danube, which has already been described, the river next in consequence is the Teis, which rising from the Carpathian mountains, towards Buckovina, and bending towards the west, receives many tributary streams from that Alpine chain ; and afterwards turning to the S. falls into the Danube not far to the W. of Belgrade, after a course of about 420 miles. At Belgrade the Danube receives the Sau, or Save, which forms a boundary between Austria and Turkey, rising not far from Idria in the mountains of Carniola, and pursuing a course nearly equal in length to that of the Tiess. That of the Drau, or Drave, extends to about 350 miles, from its source in the eastern mountains of Tyrol, till it joins the Danube below Esseg.

The Inn rises in the E. of Switzerland, from the mountain of Maloggia in the Grisons, being a point of partition dividing the waters which run towards the Black Sea, from those which flow into the Adriatic.* This powerful river is more gentle near its source, than the other Alpine streams, but soon becomes more precipitous ; and joins the Danube at Passau with a weight of water nearly equal to that stream, after a course of about 250 miles. It is now only a frontier of Austria, and that but for a small distance.

The Raab, and the Leytha, intermediate streams between the Drave and the Inn, only deserve a brief mention. The Mulda is a considerable river which rises in the southern mountains of Bohemia, and after running about 50 miles S. E. bends due N. and joins the Elbe near Melnick, after passing through Prague. The Elbe itself rises in the Sudetic mountains between Bohemia and Silesia, and waters a great part of the former kingdom before it enters Saxony, bending its course N. W. towards the German ocean. The Morau, whence Moravia derives its name, also rises in the Sudetic mountains ; and passing by Olmutz joins the Danube not far to the W. of Presburg.

Lakes.] The lakes in the Austrian dominions are numerous, and some of them of considerable size. Bohemia presents a few

* Coxe's Swiss. iii. 28.

small pieces of water towards its southern boundary ; but on entering Austria proper, the lake of Traun, the Ebernsee, and others, are of greater extent. Carinthia contains a large central lake not far from Clagenfurt ; and Carniola another, the Cirknitz See. Hungary contains many morasses, and lakes ; the most important of the latter being that of Platte, or the Platten See, extending about forty-five British miles in length, by eight in breadth, and abounding with fish. The Neusidler lake, about thirty miles S. E. of Vienna, is about thirteen miles in length by four in breadth. It is almost surrounded by fens ; and is chiefly remarkable for being in the vicinity of Eisenstadt, the princely residence of the family of Esterhazy. On the E. of the Tiess is the lake of Palitzer, about eight miles in length. In Transylvania is the Tsege To : and many small lakes are situated amidst the Carpathian mountains.

Mountains.] The provinces of Carinthia and Carniola present many considerable chains of mountains ; as that of Lobel which separates these countries ; and the Julian, or Carnic Alps, (now called Birnbaumber Wald) which divide Carinthia from Italy.

Upper Austria, or the western part of this province, contains many considerable mountains, the highest of which is in the maps called Priel, but the proper name is Gressenberg. Towards the N. Austria is divided from Bohemia by a ridge of considerable elevation, which passes to the N. E. of Bavaria. On the N. W. Bohemia is parted from Saxony by a chain of metallic mountains, called the Ertzgeberg, a word that implies hills containing mines. On the W. of the river Eger, near its junction with the Elbe, stands the mountainous group of Milessou, supposed to be the highest in the province. On the N. E. the Sudetic chain, which branches from the Carpathian, divides Bohemia and Moravia from Silesia, and the Prussian dominions.

The Carpathian mountains, that grand and extensive chain, which bounds Hungary on the N. and E. have been celebrated from all antiquity. By the Germans they are styled the mountains of Krapak, probably the original name, which was softened by the Roman enunciation : the Hungarians, a modern people, call them Tatra. This enormous ridge extends in a semicircular form from the mountain of Javornik S. of Silesia towards the N. W. But at the mountain of Trojaska, the most northern summit, it bends to the S. E. to the confines of the Buckovina, where it sends forth two branches, one to the E. another to the W. of Transylvania ; which is also divided from Walachia by a branch running S. W. and N. E. The whole circuit may be about 500 miles. The highest summits of these mountains, according to Dr. Townson, do not exceed 8 or 9000 feet, and they are for the most part composed of granite and primitive limestone.

Forests.] To enumerate the forests in the Austrian dominions would be a task at once laborious and fruitless. Suffice it to observe, that numerous and extensive forests arise in every direction, particularly along the Carpathian mountains, and in the provinces acquired from Poland. Even Bohemia was formerly

remarkable for a forest of great extent, a remain of the *Her-cynia Sylva* of antiquity, which extended from the Rhine to Sarmatia, from Cologne to Poland. The *Gabrata Sylva* was on the S. W. of the same country, where a chain of hills now divides it from Bavaria.

Botany.] The botany of Austria proper has been carefully illustrated by Jacquin; and that of Carniola by Scopoli and Hacquet, but that of Hungary is still very imperfect; and the acquisitions in Poland by the last and former partitions are as yet in a manner unknown to natural history. The general mild temperature of the Austrian states, their variety of soil and situation, from the lakes and rich levels of Hungary, to the snowy summits of Istria and Carinthia, are a sufficient evidence of the richness of their flora; each year it is augmented by the discovery of new species, and will doubtless long continue to be increased by the investigations of future botanists.

Of the bulbous-rooted plants, the principal are the tufted and clustered hyacinth; alium *victoriae*, one of the most stately and ornamental species of the large genus garlic; the orange lily; martagon, and turncap lily; dog's tooth violet, one of the earliest beauties of the spring; yellow and tawny day lily; and lastly, though perhaps superior in beauty to any of the preceding, veratrum *albium* and *nigrum*, *white and black hellebore*.

Of the class decandria, are the alpine and maiden pink; fraxinella; and two species of rhododendron, the hairy and ferruginous. The sides of the mountains from the Carpathian chain to the heights of Istria are adorned by the soldanella *alpina* and aretia *alpina*, the former with purple, the latter with white and flesh-colored blossoms. Among the numerous species of flax, the following very elegant ones are natives of Austria: hairy flax; yellow flowered f.; and Austrian f.; with large deep-blue blossoms; the stemless gentian, and the Pannonian gentian, bearing large purple blossoms.

Among the native plants of the Austrian dominions, may be distinguished two species of Adonis or pheasant's eye; the alpine poppy, with snow-white flowers; mountain anemone, the Christmas rose; and potentilla *nitida*: the sacred lotus of Egypt and India has also of late been found in some lakes in Hungary.

The flowering shrubs are, the laburnum, the flesh-colored heath, lilac, and German tamarisk. The common fruit-trees of Europe are largely cultivated in the provinces of Austria, but their list of native fruits is very scanty. The forest trees are, the elm; the wych elm; lime-tree; birch and alder; common and prickly-cupped oak; sumach; walnut; chesnut and beech; hornbeam; black and white poplar and aspen; sycamore and maple; the ash, the pine, the fir, the yew-leaved fir, and the larch.

Zoology.] The domestic animals in the Austrian dominions are commonly excellent, particularly the cattle. Many of the native horses run wild, and are sold in great numbers at the fairs, before they have suffered any subjection. The breed of cattle is mostly of a singular color, a slaty blue; and the Hungarian sheep re-

resemble the Walachian in their long spiral horns, and pendant hairy fleece.

The Urus or Bison, is said to be found in the Carpathian forests, as well as in those of Lithuania and Caucasus. Among the wild quadrupeds, may also be named the bear, the boar, the wolf, the chamois, the marmot, and the beaver. The Danube boasts of some fishes seldom found in other rivers, among which is a small and delicate sort of salmon.

There is scarcely a province of this extensive territory, from the frontiers of Bavaria to those of Turkey, which cannot boast of advantages in the mineral kingdom ; and as it were by a destiny attached to the house of Austria, even the acquisitions in Poland contain one of the most remarkable mines in Europe, the saline excavations of Wielitska. The mines of Bohemia have been celebrated from ancient times.* Silver is found at Kuttenberg, and at Joachinsthal, on the western frontier towards Saxony, probably a continuation of the veins of that country : and gold has been discovered at Keonstock. One of the most singular products of this province is tin, which is found at Zinwald (that is the tin forest,) and other western districts of Bohemia ; where is also found, at Dreyhacken, a mine of very pure copper. Lead occurs at Bleystadt, in the same quarter. The garnets of Bohemia are among the most beautiful of the kind. They are chiefly found in clay, mingled with mica, at Meronitz in the mountain of Stieffelberg, whence they are carried to Bilen.† The women wash the clay in which the garnets are found ; after which they are sifted and arranged according to size ; and sold by the pound weight from about three to ten shillings. Many workmen are occupied in cutting and piercing them, for necklaces, and other ornaments : they are polished in facets, with emery on a piece of freestone, and pierced with a small diamond. This branch of commerce is of great antiquity at Carlsbad, and at Walkirk in Suabia, where twenty-eight mills are occupied in this article only.

The fertile archduchy of Austria displays few minerals, though there be mines of gold near the abbey Goetzwig, and of alum near Krems : saltpetre is however prepared in abundance ; and at a little distance from St. Annaberg, near the frontiers of Stiria, a rich mine of silver was opened in 1754. The southern provinces of Stiria, Carinthia, and Carniola, afford many important minerals. The iron of Stiria supplies the finest steel, and great quantities are imported into England : there are considerable lead mines near Pegau on the river Mohr, yielding about 500 tons yearly. Stiria also affords coal at different places ; not to mention minerals of mere beauty or curiosity, among which may perhaps be named the singular blue granite, which is found near Villach, in Carinthia.

On the E. of Stiria extends the duchy of Carinthia, also yielding excellent iron, the mines of Friesach on the N. being particularly famous. In the neighborhood of Villach, at Bleyberg, are

* Busching, vol. vi. 126. French edit. 8vo. † Journ. des Min. No. iv. 56.

found rich lead mines ; and the same place supplies what is called fire-marble or lumachelli.

Carniola, or Krain, abounds with immense caves, and other natural curiosities : but except a few iron works, the mineralogy is little remarkable. On the west, towards the county of Gorz, which produces excellent wines, lies the Ban of Idria, a district immediately subject to the chamber of inner Austria at Gratz. The quicksilver mines of Idria are celebrated in natural history, poetry, and romance. They were discovered in the year 1499 ; and the hill of Vogelberg has annually yielded more than 300,000 pound weight of mercury. The common ore is cinabar ; but sometimes pure quicksilver runs through the crevices.

But the principal mines in the Austrian dominions are situated in the eastern provinces of Hungary and Transylvania. About 40 miles to the S. of the Carpathian hills are the gold mines of Cremnitz ; and 20 English miles further to the S. the silver mines of Shemnitz : cities which have arisen solely from these labors, and thence called mining towns. Shemnitz is esteemed the principal. The academy here instituted for the study of mineralogy is highly respectable, and only rivalled by that of Freyberg in Saxony. Hungary contains mines of copper at Schmelnitz and Herrengrund, of very rich antimony at Rosenau ; and in different parts, of coal, salt, and alum. Saltpetre is also produced in considerable quantities : and natron or soda is found in a lake near Kismaria, towards the frontier of Transylvania.* But a mineral peculiar to Hungary, and as yet discovered in no other region of the globe, is the opal, a gem preferred to all others by the oriental nations. The opal mines are situated at Czerweniza, a short day's journey to the N. of Kaschaw, and nearly under the same latitude with Cremnitz. The hill in which they are found consists of decomposed porphyry ; and they only occur at the distance of a few fathoms from the surface, of various qualities, from the opake white, or semi-opal, which is also discovered in Cornwall, to that utmost effulgence of iridescent colors which distinguishes this noble gem.

The mines of Transylvania and the Bannat are also numerous and valuable. Those of Najiag, twelve British miles to the N. E. of Deva, produce the grey gold ore. They are the richest in Transylvania. At Ofenbanya, about 25 British miles to the N. of Karlsburg is found the white gold ore, which also occurs in the hills of Fatzebay, in the same quarter. The country towards the W. of Karlsburg presents numerous gold mines near Zalathna : and in the N. of this province are those of Kapnick, Felsobanya, and others. The chief mining town of the Bannat is Orawiza, towards the S. of which are found mines of copper ; and gold and silver at Dognaska to the N.

The salt mines acquired from Poland alone remain to be described. They are situated, as already mentioned, at Wielitska, eight miles to the S. of Cracow, being excavated at the northern

* Journ. des Min. No. 2.

extremity of a branch of the Carpathian mountains. The descent is by pits of great depths ; and the galleries and chambers are of immense size, commonly supported by timber, or by vast pillars of salt, out of which material even subterraneous chapels are formed ; but travellers have idly exaggerated the splendor and extent of the saline apartments.* The salt is of an iron grey color, sometimes intermingled with white cubes ; and sometimes large blocks of salt appear imbedded in marl.† The purest sort is found at the bottom of the mine, and is sparry. The length of the mine is 6,697 feet, the breadth 1,115, and the depth 743. It has been worked above 600 years, and is apparently inexhaustible. Before the partition it yielded annually £97,222 sterling. But it has been less productive since.

Mineral Waters.] The mineral waters in the Austrian dominions are very numerous, as is to be expected in a country so mountainous, with the exception of the great plain in the west of Hungary, extending more than 250 miles in every direction. The chief are those of Baden, in Austria ; those of Carlsbad, Toplitz, Agra, and Desny, in Bohemia ; and those of Rank, Bestfeld, Gran, Buda, and Groswardin, in Hungary. These last are frequented for the hot-baths by the neighboring Walachians.

Natural Curiosities.] The glaciers and peaks of the Brenner, the calcareous hills of Carinthia and Carniola, may be ranked among the most prominent curiosities. Near Trautenau, in Bohemia, is what may be called a forest of stones, from 60 to 150 feet high ; they are by some thought to be the skeleton of a hill.

The lake Cirkutz, or the Zirchrictzer See, 8 miles long and 4 broad, in the month of June, descends through many apertures into the ground ; in September it rises again, after yielding rich pasture through the summer. In the winter it abounds with fish. The Lesero, in the isle of Cherso, diffuses its waters only every fifth year.

SWITZERLAND.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, BOUNDARIES, DIVISIONS, ORIGINAL POPULATION, HISTORICAL EPOCHS, ANTIQUITIES, RELIGION, GOVERNMENT, POPULATION, ARMY, REVENUE, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, CITIES AND TOWNS.

Names.] WE have already remarked, that this country was a part of *Gallia Belgica*. The principal tribe, which possessed it in the time of the Romans, was the *Helvetii*, after whom it was also called *Helvetia*. The name Switzerland was not given

* Coxe's Pol. i. 200.

† Townson, 388.

to it till early in the 14th century. The name is derived from one of the cantons, called Schwitz, from the circumstance, that, within the limits of that canton, the first league was formed against the tyranny of Austria.

Extent.] The length of Switzerland from E. to W. is about 200 miles; its breadth from N. to S. about 130. The contents, in square miles, are, according to Hassel, 15,755.

Boundaries.] Bounded N. W. by France; N. by the Rhine and the lake of Constance, which separate it from the grand duchy of Cleves, and the kingdom of Bavaria, both in Germany; E. by the Tyrol, which is a part of Bavaria, by the kingdom of Italy, and by Piedmont; S. W. by Savoy.

Divisions.] Switzerland formerly consisted of 13 cantons, with their allies and subjects. Several of the allied and subjected states have been annexed to France and Italy. The remainder have been formed into new cantons. The old 13 cantons retain their former names and extent, and are the first in the following table, taken from Hassel, and exhibiting the state of the country in 1809. The population is partly from a census, and partly from his estimate.

Cantons.	Inhabitants.	Cantons.	Inhabitants.
1. { Bern	232,508	11. Zug	14,735
2. { Aargau*	134,444	12. Switz	31,400
3. Basil	42,193	13. Uri	17,500
4. Schaffhausen	27,590	14. Unterwald	21,200
5. Zurich	182,123	15. Grison's Country	74,900
6. Appenzel	55,000	16. St. Gall	162,000
7. Glarus	19,280	17. Tessinot	161,000
8. Friburg	89,610	18. Thurgau†	74,000
9. Lucern	110,000	19. Pays de Vaud§	145,215
10. Soileure	43,610		

The following countries lately belonged, or were allied, to Switzerland; Geneva, now a part of France; Neufchatel, taken from Prussia by the French, now a dependency of France; the Valtelline, annexed to the kingdom of Italy; and the Valais, still a distinct republic.

The situation of these various districts can best be learned from the map.

Original Population.] The *Helvetii*, the first occupants of the country with whose name we are acquainted, were undoubtedly a Gothic tribe; and there is little reason to believe that the Celts, in their progress westward, ever took Switzerland in their way.

Historical Epochs.] The chief historical epochs may be arranged in the following order:

1. The wars with the Romans; the subjugation of the Helvetii and Rhæti, and the subsequent events till the decline of the Roman empire in the west.

* Aargau is a part of the old canton of Berne.

† Tessino, formerly the Italian Baillages.

‡ Thurgau or Turgoria.

§ Pays de Vaud, or Waadt.

2. The irruption of the Alemanni in the beginning of the 4th century, who are by some supposed to have extirpated the ancient Helvetians.

3. The subjugation of the western part of Switzerland as far as the river Reuss by the Franks, who annexed that portion to Burgundy. The Grisons on the east were subject to Theodoric, and other kings of Italy.

4. The conversion of the country to christianity by the Irish monks, Columbanus, Gallus, and others, in the beginning of the 7th century.

5. The invasion of Alemannia by the Huns* in the year 909; and the subsequent contests with these barbarians till the middle of that century.

6. About the year 1030 the provinces which now constitute Switzerland began to be regarded as a part of the empire of Germany; and in the course of two centuries they gradually became subject to the house of Hapsburg.

7. The commencement of the Swiss emancipation, A. D. 1307; and the subsequent struggles with the house of Austria.

8. The gradual increase of the confederacy, the Burgundian and Swabian wars: and the contests with the French in Italy.

9. The history of the reformation in Switzerland.

10. The insurrection of the peasants of Bern, in the middle of the 17th century.

11. The dissolution of the confederacy by the French invasion, A. D. 1798.

Antiquities.] The ancient monuments of Switzerland are not numerous, consisting chiefly of a few remains of the Romans, at Aventicum and Vindernissa. Some also occur at Ebrodunum, or Yverdun, and at Baden, the ancient Thermae Helveticæ. Of the middle ages are many castles, churches, and monasteries; the most noble among the latter being the abbey of St. Gal, the library of which supplied the manuscripts of three or four classical authors, no where else to be found. Some interesting monuments relate to the emancipation of the country, and have contributed to extend the spirit of freedom from generation to generation.

Religion.] The inhabitants compose but two sects, Calvinists and Catholics. The former are the most numerous. The proportion is more than 9 to 7. Berne, including Aargau, Basil, Schaffhausen, Zurich, the Pays de Vaud, the country of the Grisons, three fourths of Glarus, and two thirds of Appenzel and Thurgau, are Calvinistic; the remainder are Catholic. The Calvinistic clergy were all absolutely on a level. The Catholics were subjected to one archbishop, and six bishops.

Government.] Each canton was formerly an independent republic, governed by its own laws, and appointing its own magistrates. The form of government in the cantons was various. Berne, Friburg, Lucerne, Zurich, Soleure, and Schaffhausen had

* The Ugurs, so called by the writers of the time. They were a branch of the Voguls, a Finnois race.

more of the aristocratical form, while the others inclined rather to a democracy. A general diet composed of two members from each canton, and three from the various dependencies, superintended the common interests of the country. In this each canton had one vote, and every question was decided by the majority. Under this government the Swiss had enjoyed, for a succession of ages, more civil and political liberty, than any nation in Europe. No nation was as virtuous; none was as happy. The French were led thither by no provocation but innocence, by no motive but plunder; and when they came, the happiness, the virtue, the liberty, and the glory of the Swiss were all buried in one common grave.

A new constitution was established for them by the First Consul, in 1802. The government consists of two landammans, a senate, and a diet. The diet, composed of representatives from the cantons, meets annually; and, at the proposition of the senate, declares war and makes peace, ratifies treaties, and adopts, or rejects, such laws, as less than two thirds of the cantons have approved. The senate consists of 2 landammans, 2 stadholders, and 26 councillors. It names all public functionaries. A deputation of the senate administers the government during a recess of that body.

This government was forced upon the inhabitants at the point of the bayonet.

Population.] The amount of the various sums in the table is 1,635,408. Hassel's general estimate is 1,638,000.

Army.] The military force, in 1809, was 15,023 men. There were then from 20 to 30,000 Swiss soldiers in foreign countries. France alone had 15,000; the rest were in England, Spain, and Holland.

Revenue.] The revenue in 1809, was stated by Hassel at 1,000,000 German guilders, or 555,500 dollars. Formerly it was computed at more than a million sterling. Bern is still the richest of the cantons, and is said to have large sums in foreign funds.

Manners and Customs.] The houses of the Swiss are of wood, constructed in the most simple form, with staircases on the outside. The dress of the inhabitants in most of the cantons, was regulated by sumptuary laws. In the rest, the changes of fashions were little regarded. The cleanliness of the houses, and of the people, was striking. Even the cottages conveyed a lively idea of neatness and simplicity, and impressed a pleasing conviction of the peasant's happiness. Each had its little territory distributed into a garden, a field, a meadow, and a pasture, frequently skirted with trees, and well supplied with water. The diversions of the inhabitants were chiefly of the active and warlike kind, such as running, wrestling, and shooting with the bow and musquet. The magistrates were exemplary in the punishment, and prevention of petty offences, than which no surer method can be taken to preserve the morals of the community. The Swiss were intensely attached to their native country. The slightest circumstances reminded the absent soldier of the scenes of his in-

fancy, and drew him back by an irresistible attraction to the streams and the vallies, the mountains and the forests, among which he passed the happiest season of life.

Language.] The French is spoken in the Pays de Vaud. The language called the Vaudois appears to have been confined to the vallies of Piedmont.

Literature.] The early monuments of Swiss literature consist, as usual, of chronicles and lives of saints. Since the restoration of letters, and the reformation of religion, Switzerland boasts of many eminent names, as the reformer Ulric Zwingli, born at Wildhausen; Herbsk, who called himself Oporinus, the printer; Conrad Gesner, born at Zurich in 1516, who published an universal library, and some treatises on natural history; and that noted quack Paracelsus. Among the writers of the last century may be named Bernoulli, the mathematician, a native of Basil; Scheuchzer, the natural historian; Haller; John Gesner, the natural philosopher; Solomon Gesner, the poet; Bonnet, Hirzel, and Zimmerman, physicians; Rousseau, and Necker, natives of Geneva; Lavater, the physiognomist; Euler, the mathematician; and many others.

Education.] Switzerland resembled Connecticut in the general diffusion of knowledge. The education of the common school was universally shared by the inhabitants. Religious instruction was communicated successfully every sabbath, and the inhabitants generally had an important acquaintance with the doctrines and the duties of Christianity. There was an university of some reputation at Basil, founded in 1469, and colleges at Berne, Zurich, and Lucerne.

Cities and Towns.] Basil, or Basle, formerly *Basilea*, is built on the Rhine, which is here broad, deep, and rapid, very near its great northern bend. The greater part of the town lies south of the river. A bridge connects it with the other part. Its extent is capable of containing 100,000 inhabitants, and it is said to have 220 streets and 6 market places. The environs consist of fine level fields and meadows. Here were extensive manufactures of ribbands and cottons, and the trade of the place was considerable. The number of inhabitants is 15,060. The cathedral is a noble Gothic building, containing the marble tomb of Erasmus. There are 6 parochial churches, and various other public buildings. Berne stands on a peninsula formed by the Aar, the neck of which is fortified. The streets are wide, and the houses mostly of stone. The great church is a most beautiful piece of architecture. The city is of singular neatness, and beauty, and the environs are rich and fertile, presenting a prospect of hills, lawns, wood, and water, bounded at a distance by the long chain of the superior Alps. Inhabitants 13,359.

Zurich, *Tigurum*, stands at the mouth of the Lake of Zurich, where its waters are discharged northwards, through the Lammat towards the Rhine. Here were manufactures of linens, cottons, muslins and silk handkerchiefs. Inhabitants, in 1807, 10,853.

Lausanne, in the Pays de Vaud, is prettily built on three small hills, about half a league from Geneva Lake. Houses, in 1798, 1,300 ; inhabitants 9,965.

Freiburg has 800 houses, and 6,094 inhabitants.

Schaffhausen, on the north bank of the Rhine, near a celebrated cataract, has 811 houses, and 7000 inhabitants. It had 4 churches, and a college with 8 professors.

St. Gall, a little S. W. of the Lake of Constance, has, according to the Helvetic almanac of 1808, 962 houses, and 9000 inhabitants. Here were extensive linen manufactures.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Climate.] MANY of the mountains are covered with perennial snows, and the frosts of winter are often very severe. But the summer has sufficient heat to mature the grape, though the vine harvest is rendered precarious by the occasional cold winds from the Alps. Even the corn harvest is so often injured by rains and tempests, that public granaries were every where erected to supply the failure of crops. The vallies are generally warm, and such is the diversity of seasons in different parts, that the inhabitants are often reaping on one side of the mountains when they are sowing on the other.

Face of the Country.] Switzerland is generally mountainous, but less so in the north, than in the south. Basil, Berne, Zurich, Schaffhausen, Soleure, Friburg, and Thurgau, are the most level; but even here are eminences from 2000 to 2500 feet above the sea. Some of the mountains are barren, inaccessible rocks, often overspread with immense fields of ice; others are crowned with groves and forests, and ornamented with vineyards, fields, and meadows; while others are every where studded with cottages and hamlets.

Soil and Agriculture.] The vallies and plains, though generally stony, are fertile. The sides of the hills, also, with a vigorous cultivation, repay the labor of the husbandman, and perhaps in no country, except Holland, does the eye meet with more numerous proofs of persevering industry. Sufficient grain is commonly raised for home consumption. Barley is cultivated on the mountain tops; oats, rye, and spelt, require successively a warmer situation. Flax and hemp are cultivated to a considerable extent; and tobacco has lately been introduced. The vine is cultivated with most success in Berne, Schaffhausen, and the Pays de Vaud. The attention of the Swiss farmer is, however, chiefly devoted to his cattle, and most of the fertile land is used for meadow and pasture. Apples, pears, plums, cherries, and nuts, are found cv-

ery where in abundance ; and, in the warmer districts, peaches, almonds, figs, and pomegranates.

Rivers.] The Rhine and the Rhone have already been described.

The Aar has its source in Mount Grimsel, in the southern part of the canton of Berne, and pursuing a winding course towards the N. W. passes through the Lake of Thun, to Aarberg. Here it turns to the N. E. and receiving the waters of the Lake of Neufchâtel, and being joined by the Reuss and the Limmat, falls into the Rhine, opposite Waldshut, after a course of 150 British miles. The Reuss issues from Mount St. Gothard, and passing through the Lake of Lucern runs N. to the Aar, a course of 80 miles. The Limmat, running 20 miles, enters the Lake of Zurich ; from which it runs about the same distance, and joins the Aar, a little below the Reuss.

The Thur runs westward, and joins the Rhine below Schaffhausen. The Tessino falls into the Lake of Maggiore.

Lakes] The lakes of Switzerland are numerous and interesting. The most considerable are those of Constance on the N. E. and Geneva on the S. W. The former is about 45 miles in length, and in some places 15 in breadth. This beautiful expanse of water is by the Germans also styled the Boden Zee. Like all the other lakes of Switzerland, it is deeper in the summer than in the winter, owing to the melting of the snows, and is remarkable for producing large red trout.

The lake of Geneva extends in the form of a crescent, about 40 miles in length, and 9 at its greatest breadth. The beauties of this lake have been celebrated by Rousseau ; but would be considerably increased if it were sprinkled with islands.

Only a part of the lake Maggiore, or that of Locarno, is in Switzerland ; but the lake of Lugano forms an extensive body of water in that region. The lakes of Neufchâtel and Zurich are each about twenty-five miles in length, by about four in breadth. That of Lucerne is about fifteen in length, and the breadth no where above three. Next to these are the lakes of Thun and Brienz ; of Joux and Rouss, on the French confines ; the lakes of Morat, and Bienna, of Sempach, Zug, Wallenstadt, and others of inferior note.

Mountains.] The Alps, the most celebrated of the mountains of antiquity, commencing near the Gulf of Genoa, not far from Monaco, pass between Piedmont, on the E. and France and Savoy on the W. through Switzerland, and between Italy on the S. W. and Germany on the N. E. till they terminate at the Gulf of Carnero, on the E. of Istria. The whole length of the chain is about 550 miles. Different parts of it have received different names, but the common name of Alps has been extended to the whole. The Maritime Alps, *Alpes Maritimae, vel Littorea*, reach from the Gulf of Genoa to Mount Cenis, near Susa ; though the northern part of this ridge, from Mount Viso N. was anciently called *Alpes Cottiae*, now Mont Genèvre, in which are the springs of the Durance. The *Alpes Graiae*, now Little St. Bernard, in-

clude Mount Cenis, and pass between Savoy and Piedmont, to Great St. Bernard. The Pennine Alps, *Alpes Penninae*, include St. Bernard and Mont Blanc, and the grand chain south of the Rhone, which separates the Vallais from Piedmont, and terminate at Mount St. Gothard. The eastern part of this ridge was formerly called, from the tribe that inhabited it, the Leontine Alps, and gives rise to the Rhone and the Tessino. The ridge running eastward from Mount St. Gothard, to the sources of the Piave, is called the Rhetian Alps, *Alpes Rhaetiae*. East of this the ridge was anciently called *Alpes Noricae*, to the sources of the Tagliamento; at the eastern extremity of which the chain bends more to the S. and is called the Carnic Alps, anciently *Alpes Venetae*, *Alpes Pannonicæ*, and afterwards *Alpes Juliae*. These are all regular continuations of the Great Chain of the Alps. The highest eminence of this chain is Mont Blanc, separating the N. W. corner of Piedmont from Savoy. Its summit and sides, to the depth of 4000 feet perpendicular, are covered with perpetual ice and snow. The first, who explored its summit, was Mr. De Saussure, of Geneva, in 1787. Sir George Shuckburgh measured its height with great accuracy, and found it to be 15,662 feet above the ocean, a greater elevation than that of any measured mountain in the old world. The other high summits in the chain are St. Bernard, Maudit, Combin, Cervin, and Rosa; the last of which is midway between St. Bernard and Lake Lugano, and falls only 60 feet short of the height of Mont Blanc.

The Helvetic Alps are a ridge north of the Rhone, and running nearly parallel with the principal chain from the bend of that river to Mount St. Gothard, which seems to be a bond of union between the ridges, for it is described as belonging to both. Thence the Helvetic ridge, however, continues its former course, comprising Mount Badur, and the glaciers to the north of the Farther Rhine, while the southern chain bends more to the S. The chief eminences between the Rhone and Mount St. Gothard, are Gemmi, Jungfrau, Schreckhorn, and Finsteraar, both 13,218 feet high; Grimsel, Furca, and Titlis, 10,818; while St. Gothard is estimated by Pfeffer, at only 9,075. Of all these the Jungfrau is said to be the highest, while the Schreckhorn or *Peak of Terror*, by its very name, announces its peculiar ruggedness and horror.

Botany.] The rocks of the higher Alps, are almost wholly destitute of vegetation; the crustaceous lichen, the Silene acaulis, saxifraga nivalis, and stellaris, comprise the whole of their scanty flora.

In the alpine valleys, are the juniper, the savine, the stonepine, alder, and the alpine rose; in the clefts of the rocks are tufts of saxifrages, and auricula; and the hillocks are adorned with the rhododendron, and azalea.

Below these commence the forests of larch, pine, and fir, intermixed here and there with the yew, the mountain ash, and the birch.

Here in the upper meadows, the richest of Switzerland, we find the yellow gentian, the white hellebore, the *ætæa*, the alpine anemone, and innumerable other mountain plants.

The subalpine regions are diversified with meadows and corn-fields, and forests of deciduous trees. The oak, the elm, the beech, the ash, the lime, and the hornbeam are the most prevalent, and the borders of the streams are shaded by poplars and willows.

In the plains and broad vallies of Geneva, of Basle, and of the Pays de Vaud, we meet with numerous vineyards. The walnut, the chestnut, the fig, the pomegranate, the bay, and laurel, and the Cornelian cherry, are among the trees; the lavender, hyssop, fraxinella, several kinds of cistus, and the peony, are the chief of the plants and shrubs. The valleys that open towards Italy contain, the lilac, the caper-bush, the almond, the Indian fig, and American aloe.

Zoology.] The horses of Switzerland are esteemed for vigor and spirit: and the cattle attain great size. Among the animals peculiar to the Alps may be first named the ibex, or rock goat. This animal resembles the common goat; but the horns of the male are very long and thick. The hair is long, and ash colored, with a black list along the back.

Another singular animal is the chamois, which is commonly seen in herds of 20 or 30, with a centinel who alarms them by a shrill cry. The color is yellowish brown; but they sometimes occur speckled. The marmot is common in the Swiss mountains. The skin of this animal is used for furs. The size is between that of the rabbit and the hare. Among the birds may be named the vulture, called also the golden or bearded vulture. It inhabits the highest Alps, forming its nest in inaccessible rocks.

Mineralogy.] The mountains contain iron, sulphur, and crystal. This last is found in pieces weighing from 7 to 800 weight. Rock salt is found in the canton of Berne. Granite, porphyry, asbestos, jaspers, and agates are abundant in the Alps. Tremolite has its name from mount Tremola, near St. Gothard.

Mineral Waters.] Of mineral waters the most remarkable are those of Leuk. To the S. E. are the baths of Alvenew, which are sulphureous and resemble Harrowgate water.

Natural Curiosities.] The glaciers of the Alps are immense fields of ice, unrivalled in their extent and magnificence. The peaks and ridges of the higher summits are overspread with perpetual snows; and the intermediate depths and spaces between them are filled with ice, spread out like a sea, and reaching often a great distance down the mountains, even to the borders of the cultivated vallies. These immense masses resting on an inclined plane, and often feebly supported, sometimes slide down the declivities, and in a moment overwhelm the villages and hamlets below. They are usually intersected by numerous deep fissures, and chasms, and present to the eye a thousand fantastic shapes of walls and pyramids, of houses and temples, of cascades and torrents. In some places the ice is of a splendid white; in others of a beautiful azure, and every where transparent and dazzling. Mr. Coxe compares the surface of the glaciers to the appearance of a lake frozen in the midst of a tempest.

The torrents frequently undermine large masses of rock and of

earth on the mountains, till at length they are precipitated into the vallies below. A memorable instance of this kind occurred in September 1806, in the canton of Schweitz. The Knipperbuhl rock, the summit of Rosenberg, and a considerable part of the mountain having been thus undermined, fell from an immense height into the valley and a lake adjacent, and in a moment buried beneath them several populous villages, with their churches, and numerous mills and farms. Upwards of 1000 persons perished. General Pfaffer, from his knowledge of the mountain, had predicted such an event 20 years before.

THE VALLAIS.

THIS republic was separated from its connection with Switzerland, at the time of the new organization of the government of that country and was annexed to France in 1811. It has Saxony on the W. Piedmont on the S. and Switzerland on the N. and E. It is about 100 miles long from N. E. to S. W. and about 25 broad, containing 2027 square miles. This territory was called *Valesia*, in the middle ages. In 1475, the inhabitants withstood the power of Austria, and joined the cantons. The religion is the Roman Catholic; the population about 100,000; and the revenue 80,000 guilders. The whole country is one large valley. The soil surpasses that of Switzerland. The fine fruits of Italy grow in full perfection. The asthma is a prevalent disease, and most of the inhabitants are afflicted with goiters. The languages spoken are the German, French, and Italian. Sion is the capital of the country. It stands upon Sion river near its junction with the Rhone, and contains a college, some convents, and 6 churches. The hills and vallies breed great numbers of cattle, and afford plenty of deers, hares, and other game. Here are said to be mines of silver, copper, lead, and coal. The hot baths of Brugg, and Leuck, are celebrated mineral waters.

GENEVA.

THIS little republic was situated at the southern extremity of Geneva lake, where, contracting, it forms the Rhone. The inhabitants became christians in the 3d century, and in the middle of the 4th, was the see of a bishop. After the overthrow of the empire, it fell successively to Burgundy, France, and Germany. In 1526, it entered into an alliance with the cantons, to resist the encroachments of the dukes of Savoy. In 1535, the doctrines of the reformation were established, and the celebrated Calvin here found a safe retreat from the persecution of the Catholics. The territory belonging to the republic comprised about 60 square miles; and the population was 30,000. The city of Geneva itself, contained, in 1802, 23,309 inhabitants. The Rhone divides it into two unequal parts. The town and territory are now an integral part of France.

SPANISH EMPIRE.

THE Spanish, like the British Empire, embraces portions of territory in all the four quarters of the globe.

1. IN EUROPE.

Spain.
Majorca,
Minorca,
Ivica, } Islands in the Mediterranean.

2. IN AFRICA.

African Presidencies, Ceuta, Melilla, and a few other cities.
Canary Islands,
Isle of Fernando Po,
Prince's Island,
Annabon Island, } in the Atlantic.

3. IN ASIA.

Philippine Islands,
Calamianes,
Ladrones, or Marian Islands,
Carolinas,
Part of Magindanao,
Bashee Islands (south of Formosa.)

4. IN AMERICA.

Floridas,
Mexico,
Cuba, I.
Porto Rico, I.
New Grenada, or Western Terra Firma,
Peru,
Chili,
Buenos Ayres, or Paraguay.
Falkland Islands.

The republic of *Venezuela* was, till July 5th, 1811, a province of Spain, called the *Captain-generalship of Caraccas*. At that time the inhabitants declared themselves free, and formed an independent government. Buenos Ayres, Chili and Peru, acknowledge also but little dependance on the mother country, and probably, with the rest of the Spanish provinces in South America, will soon become independent states.

SPAIN.

CHAPTER I.

HISTORICAL GEOGRAPHY.

EXTENT, BOUNDARIES, NAMES, DIVISIONS, ORIGINAL POPULATION, HISTORICAL EPOCHS, PROGRESSIVE GEOGRAPHY, ANTIQUITIES, RELIGION, GOVERNMENT, LAWS, POPULATION, ARMY, NAVY, REVENUE, POLITICAL RELATIONS, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, UNIVERSITIES, CITIES, EDIFICES, MANUFACTURES AND COMMERCE.

Extent.] SPAIN lies between lon. 9° 17', 30 W. and 3° 45' E. and between lat. 36° 6' 30", and 43° 46' 30" N. Its greatest length, from Cape Finisterre to Cape Ortegal, is 620 miles : and its greatest breadth is 530. The number of square miles, according to Hassel, is 195,510, and including the Balearic islands, 193,330 ; while Pinkerton estimates it at only 148,000.

Boundaries.] Spain is bounded N. by the Bay of Biscay and France ; E. by the Mediterranean ; S. by the same and the Atlantic ; W. by Portugal and the Atlantic.

Names.] The Greeks knew this country by the name of *Iberia*, derived from the river *Iberus*, now the Ebro. The Roman poets called it *Hesperia*, or the western land, and *Hesperia Ulterior*, to distinguish it from *Hesperia Citerior*, or Italy. Its geographical name among the Romans was *Hispania*, derived undoubtedly from *Spanija*, the name originally given it, according to Bochart, by the Phoenicians, from *Span*, a rabbit, because it abounded with those animals. From *Hispania* the Spaniards have derived *Espana* ; the Italians *Espagna* ; the French *Espagne* ; the English *Spain* ; and the Germans, *Spanien*.

Divisions.] The following we believe to be an accurate account of the divisions and subdivisions of Spain, with the extent and the population of each in 1787 ; together with the number of cities, boroughs, villages, and parishes.

Kingdoms.	Provinces.	Extent.	Population.	Cit.	Bor.	Villa.	Par.
Gallicia,		14,030	1,343,803	1	120	187	306
Asturia,	{ Oviedo, Santillana,	5260	347,776	3	290	4757	1284
Biscay,	{ Biscay, Alava, Guipuscoa,	1430 1100 800	116,042 71,399 120,716				124 432 76
Navarre,		3950	227,382				
Arragon,		15,550	623,308	11			
Catalonia,		12,710	814,412				
Valencia;		10,740	932,150				

Kingdoms.	Provinces,	Extent.	Population.	Cit.	Bor.	Villa.	Par.
Mallorca,	{ Mallorca, Minorca, Ivica,	1890	179,066				
Murcia,		5480	337,686	7	230	133	365
Granada,	{ Granada, Antequera,	12,710	661,661	7	81	3203	3658
			19,638				67
Andalusia,	{ Seville, Cordova, Jaen,	9250	754,293	1	59	185	249
		6490	236,016	2	134	502	766
		5260	177,136	2	179	554	499
Estremedura,		14,950	416,922	1	83	229	329
	{ Leon, Palencia,		250,134	15	160	26	219
Leon;	{ Toro, Zamora,	17,640	112,514	4	55		63
	{ Salamanca, Valladolid,		92,404	5	58	11	74
			74,669	17	182	172	397
	{ Burgos, Segovia,		210,389	1			
Old Castille,	{ Soria, Avila,	16,220	196,839	5	60	1	108
	{ Madrid, Toledo,		465,410	6	588	1191	1828
			174,289	1	100	302	410
New Castille,	{ Guadalaxara	37,940	170,565	4	132	482	639
			115,172	1	90	207	286
			216,226		73	17	92
			337,078	2	229	100	327
			266,182	2	232	186	431
			214,078	2	93	93	114

Original Population.] The Celts, from Gaul, constituted the original population of Spain. They were called *Celtiberians*, as they were Celts inhabiting *Iberia*, to distinguish them from the Gallic and British Celts; and appear, in very early periods, to have overspread the whole of the country. Spain was occupied by them, when the Egyptians, Phenicians, and Tyrians successively established themselves on its coasts, and made its ports the seat of an extensive commerce. The Celts were compelled to retire before the *Mauri*, or Moors, from western Africa, who drove them from the southern and eastern parts of Spain, and who long before the time of Julius Cæsar had passed the Pyrenees, and, under the name of *Aquitanis*, had possessed themselves of the southwestern part of France. The Carthaginians had been called in by the Tyrians to their assistance against the Spaniards at an early period, even a short time after they had built *Gades*, or Cadiz; and had subdued the neighbouring country. But they were never extensively dispersed over Spain, till about the time of Hamilcar. Probably great numbers of these colonists never left the country. The Romans, even before the fall of Carthage, had conquered Spain, and prodigious numbers of them emigrated to the newly acquired territories. No one of the subjugated countries appears to have allure away so many of the inhabitants of Italy. A great proportion of the present population is descended from these colonists. This fact explains the reason why the Spanish language so nearly resembles the Latin. The Vandals, Alans, and Suevi, destroyed the Roman

power in Spain, and were succeeded by the Visigoths, whose empire extended over a considerable part of the country for 130 years, and was finally overthrown by the Saracens, or Mahometan Moors, in the early part of the 8th century. The Saracens during their long dominion gave a decided cast to the Spanish character and language, and various places in Spain still retain their Arabic names. Few however of their descendants remain in the country ; and the modern Spaniards may be considered as chiefly descended from the Romans, the Mauri, the Celts or Celtaiberians, and the Visigoths.

Historical Epochs.] The following are the chief epochs in Spanish history.

1. The original settlement by the Celts, and then by the Mauri. During this period the Egyptians, Phenicians, Tyrians, Milesians, Carians, Lesbians and Phoeceans are mentioned by Eusebius, as having successively got possession of a part or the whole of the coast, and for a time to have held the dominion of the sea.

2. The Carthaginian conquest of Spain about the time of the first Punic War.

3. The Roman dominion, which lasted from B. C. 196 to A. D. 411.

4. The domination of the northern barbarians. The Suevi, Vandals, and Alans, divided Spain and retained it till the Visigoths, under Euric, subdued all the country except Gallicia, which to this day is peopled by descendants of the Suevi.

5. The domination of the Saracens. Their first descent on Spain was made in the year 712. In eight months they overthrew Roderic, the Spanish king, and his army, and overran the whole country, except Asturias, Burgos, and Biscay. In 718, Don Pelayo, one of the royal family, reestablished the Gothic kingdom among the mountains of the Asturias. His successors built Oviedo in 757, and made it their capital. Afterwards conquering Leon from the Moors, they called their kingdom the *kingdom of Oviedo and Leon*. In 758 the christian kingdom of Navarre was established under Don Garcia Ximenes. In the same year, Abdalrahman, the caliph's viceroy, assumed the title of Caliph of Spain, and made Cordova the seat of his government. This dynasty lasted till A. D. 1038, when the Moorish governors of Toledo, Cordova, Seville, Valentia, and Granada, usurped the royal style, and for some time maintained the shadow of royalty. The christian kingdoms of Castile and Arragon, however, had been formed previous to this last epoch, for Don Sanchez, king of Navarre, had bestowed the former, in the year 1035, on his eldest son Ferdinand ; and the latter, the same year, on his son Ramira.

6. The union of the crowns of Castille and Arragon by the marriage of Isabella and Ferdinand in 1474. The kingdom of Granada, the last of the Moorish possessions, was subdued by Ferdinand in 1490.

7. The reign of the emperor Charles V. king of Spain, and emperor of Austria, which began in 1517. The power of Spain was now at its zenith.

8. The conquest of Portugal by Philip II. of Spain, and I. of

Portugal, in 1580, soon after the defeat of the Portugueses, in Africa, by Muley Moloch. The Spaniards found their conquest an unquiet possession during the 60 years of its subjugation. In 1640, John duke of Braganza, put himself at the head of the Portuguese, who unanimously shook off the Spanish yoke, and bravely achieved their independence.

9. The termination of the Austrian dynasty by the death of Charles II. November 1, 1700: and the accession of the house of Bourbon, in the person of Philip grandson of Louis XIV.

10. The kidnapping of the Spanish royal family at Bayonne, in the spring of 1808, by the French emperor, and the subsequent attempt to impose his brother Joseph on the Spaniards, in the room of Ferdinand VII. the lawful monarch.

Progressive Geography.] Before the Carthaginian conquest Spain was divided into a multitude of petty states, of which even the names have not reached us. We are equally unacquainted with the Carthaginian divisions. The Romans at first divided the country into *Hispania Citerior*, and *Ulterior*. The former reached from the Pyrenees to the mouth of the Douro, on the Atlantic, and to the eastern boundary of Grenada on the Mediterranean. In the time of Augustus it received the name of *Tarraconensis*; while *Hispania Ulterior* was subdivided. That part between the Douro, on the N. and the gulf of Cadiz, was called *Lusitania*; and the southeastern division *Baetica*. The principal tribes inhabiting Spain were in *Tarraconensis*, the *Callaeci* in Gallicia; the *Astures*, in Asturia; the *Contabri* in Biscay, after whom the Bay was called *Sinus Contabricus*, and who were the last that yielded to the Romans; the *Concani*, in the eastern part of the same province, famous for drinking the blood of horses; the *Vascones* in Navarre; and the *Celtiberi*, an extensive and powerful nation, in the country of the Ebro; in *Baetica* the *Turdetani*, who occupied most of Andalusia; and the *Bastuli* and *Bastitani* in Grenada: in *Lusitania* the *Lusitani* in the S. and the *Veltones* in the N. The origin of the modern divisions has already been found in the petty states and kingdoms of the Moors and Christians.

Antiquities.] No remains of the *Celtae* or *Mauri* have yet been discovered, nor any of the Carthaginians, except coins which have been found in considerable numbers.

Some of the finest reliques of Roman art are found in Spain. The aqueduct of Segovia was built in the time of Trajan, and has braved with impunity the corrosion of 16 centuries. It rests on 161 arches, three of which, in some places, stand one upon another. Its greatest height, in the valley which it crosses, is 102 feet, and its length 2220. It is composed of square stones, placed one upon another without any appearance of cement. In Murviedro, the ancient Saguntum, is a large theatre capable of holding 9000 persons. Here also are the remains of an ancient circus, and a temple of Bacchus. In Tarragona and Toledo, also are various remains of a similar nature.

The Visigoths have left few relics, except their coins, which are of gold, a metal then unknown to the other European mints. The

Alcazar, the ancient habitation of the Gothic kings, at Toledo, was repaired by Charles V. It is now in ruins.

The Moorish antiquities are numerous and splendid. Of these the palace of the *Alhambra*, at Granada, is far the most magnificent. The court to which you are first admitted is called the *Communa*, a large room 150 feet by 90, with a deep basin of clear water in the midst, 100 feet in length, into which is a descent by two flights of marble steps, and on each side a parterre of flowers and a row of orange trees. At each end is a colonnade. From hence you pass into the court of the lions, an oblong room 100 feet long, and 50 broad, adorned with a colonnade of 140 marble pillars. In the centre are twelve ill-formed lions, muzzled, bearing on their backs an enormous basin, out of which rises another of smaller size. The royal bedchamber has two alcoves, adorned with columns, and a fountain between them. The great hall is 40 feet square, and 60 high, with eight windows, and two doors, all in deep recesses. Between this and the *Communa* is a gallery, 90 feet by 16. The dressing room of the Sultana is a little tower, in one corner of which is a large marble flag, penetrated with holes, through which the smoke of perfumes ascended from furnaces below. A long passage leads hence to the hall of the ambassadors, which opens into the great audience hall, 36 feet square, 36 feet high, to the cornice, and 18 thence to the centre of the cupola. On the south side of the court of the lions is a circular drinking room, in which the Abencarrages were put to death by Abouabdallah. The exquisite manner in which the stucco is designed, painted and finished exceeds all power of description. This palace was completed in 1336. The Generalif, or house of pleasure, built by Omar, stands upon a high mountain at a small distance, and is surpassed in magnificence only by the *Alhambra*. The beauty of its situation is unrivalled.

Other superb monuments of Moorish art are found at Toledo, Seville, and Cordova.

The only christian antiquities worthy of notice, are the cathedrals and castles. The cathedral of Cordova is 474 feet by 414, adorned by 600 columns of marble. That of Grenada, is 425 feet long and 249 broad, with a dome 160 feet high, and 80 in diameter. Those of Burgos and Segovia are also large and magnificent.

Religion.] The Catholic is almost the only religion known or tolerated in Spain, and is here exercised in all its ceremonial orthodoxy. Only at Madrid, and the most important sea-port towns, are persons of different persuasion suffered to reside, though in most parts of the country there are secretly great numbers of Jews and Mahometans. The Court of Inquisition, instituted in 1478, by Ferdinand the catholic, was long invested with exorbitant power, a power exercised with a degree of intolerance and cruelty known in no other country but Portugal. The high court is at Madrid, and 8 subordinate courts are scattered over the kingdom. For some time previous to the late revolution, it was nearly stript of its terrors, and since that event, an edict of king Joseph, has ordered it to be abolished. There are in Spain 8 archbishoprics,

48 bishoprics, 117 cathedrals, 18,537 parishes, 2,146 monasteries, and 1023 nunneries. The revenues of the archbishoprics are very great. That of Toledo is about £90,000 sterling. The whole number of clergy, in 1787, was 188,625, of whom 22,460 were parish priests, and their assistants; 61,617 monks; 32,500 nuns; and 2,705 inquisitors. The clergy have three spiritual orders of knighthood, those of Santiago, Calatrava, and Alcantara, all possessed of very large estates. The Spaniards are bigotted Catholics. They often unite a ceremonial piety with the practice of every vice.

Government.] The fundamental laws of the monarchy are the indivisibility of the monarchy, the right of primogeniture, and the exclusion of females from the throne, till after the whole male line is extinct. The government is now a despotic monarchy, balanced however by the power of the church, and tempered by many councils, who are responsible for the success of their own measures. Formerly the Cortes, or states of the kingdom, met annually, and for a long time limited the sovereign power. These consisted of deputies of four classes, two from the nobility, one from the clergy, and one from the cities. This body met but twice during the last century.

The chief councils are, 1. The Cabinet Council composed of the king and the ministers of foreign affairs, of war, of the marine, of finances, of the Indies, and of favor and justice. 2. The Council of State. 3. The Council of Finances. 4. The Council of War. 5. The Council of Castile. 6. The Council of Arragon. 7. The Council of the Inquisition. 8. The Council of the orders of Knighthood. 9. The Council of the Indies. 10. That of the Crusada, which determines the subsidies to be granted by the clergy. There are 12 tribunals in the different provinces, called *Audiencias*. The judges of the inferior courts of justice in the smaller towns, are called *Alcaldes*; those in the large cities, *Corregidores*.

The Spanish grandees are extremely numerous. All the Bis-cayans and Asturians are reputed noble.

Laws.] The only authentic laws by which justice is administered are registered in the codes published by the ancient kings. The principal code, and that which is in constant use, is called *Recopilacion*. It is a collection of edicts from the earliest ages, to the present time. A new edition is occasionally published, in which the late laws are inserted. The Roman civil law is frequently consulted in practice. The canon law is the received code in all ecclesiastical affairs. Torture is not wholly disused. Law-suits are exceedingly expensive, and of long duration.

Population.] The census of 1787 gave a population of 10,268,150. Hassel estimated it in 1809, at 10,396,000. Since that time it must have been seriously diminished by the indiscriminate carnage occasioned by the armies of France. Spain has for a long time been one of the least populous countries in Europe. This deficiency is imputed, by Townsend, to the expulsion of the Jews and Moors, to the contagious fevers in the south, to the intestine wars with the Moors, carried on incessantly for 7 centuries, to the emi-

grations to America, and to the vast number of the clergy who never marry. A more operative cause than either, and perhaps than all of these, may be found in the extreme indolence, which has so long characterized the great body of the Spaniards.

The population, in 1787, was thus divided.

Unmarried Males	2,926,229
Married do.	1,947,165
Widowers	235,778
Unmarried females	2,753,224
Married do.	1,943,496
Widows	462,258
	<hr/>
	10,268,150

The numbers of each rank were as follows.

Male Clergy	156,125
Knights	480,589
Lawyers	5,917
Scriveners, notaries, and clerks	9,611
Scholars	50,994
Husbandmen	917,197
Day laborers	964,571
Merchants	34,339
Manufacturers	39,750
Mechanics	270,989
Servants	280,092
Persons in the king's pay	36,465
Persons with military privileges	77,884

Of the Knights, 401,040 were in the provinces of Asturias, Biscay, Burgos, Galicia, and Leon.

The census of 1787 exceeded that of 1768-9, by 960,346 souls.

Army.] In 1806, the army amounted to 153,840 men, consisting of infantry, 99,240; cavalry, 8,894; guards, 8,070; artillery, 6,000; engineers, 1,396; provincial troops, 30,240; under the command of a generalissimo, 5 captain-generals, 92 lieutenant-generals, 136 major-generals, and 225 brigadiers. Since the revolution almost every man has become a soldier, and the Spanish recruits have in many instances exhibited the valour and intrepidity of veteran troops. The want of talents in the Spanish generals, and of vigor and unanimity in the Junta, will be the chief causes of the ruin of the patriots, if they are ultimately unsuccessful.

Navy.] In 1808, the navy amounted to 218 sail; whereof 42 were of the line, 30 frigates, 20 corvettes, 4 zebecks, 40 brigantines, 15 bomb-vessels, and 67 smaller vessels. These were manned by 2,379 marines, 3,320 artillery, and 36,000 sailors.

Revenue.] Llerena states the Spanish revenue at 616,295,675 Rials de vellon, or about 32,575,000 dollars. Others state it at 50 millions of piasters, or 40 millions of dollars. The first nearly agrees with the estimate of Hassel, and is probably correct. Of this revenue America furnishes about 2,100,000 dollars. The expenditure usually somewhat exceeded the revenue. The national debt, in 1809,

was estimated by Hassel at about 311,000,000 dollars. In 1783, it was 81,364,000; in 1790, 123,200,000; and in 1800, 203,000,000. Spain is the poorest country in Europe, although it annually receives more specie, than any other. About 40,000,000 dollars are annually brought hither, of which about 32,000,000 come from America. The whole amount imported in the registered ships alone, from the discovery of the mines to the year 1725, was 5,185 millions in gold and silver. But it merely passes through Spain, to the residences of industry and enterprise.

Political Relations.] The power and proximity of France had long rendered Spain in a measure dependent; and till the late revolution they had for many years been closely united. Nothing but the American colonies gave the mother country any influence on the politics of Europe. The late rude attack upon her independence, has opened the eyes of her own citizens to the real designs of the French government. The supineness of the Spanish character has, to a good degree, been shaken off, and many of the soldiers have exhibited as great valor, as the pen of history ever described. The scenes at Saragossa and Gerona, were never surpassed, and the name of Palafox can find few competitors. Hitherto the loss of men has been the greatest on the side of the invaders. If Spain is subdued, she will prove an unquiet conquest; and the natives of France will find no safety but in the neighborhood of their forts and armies. The invasion of this unhappy country was like an invasion from the infernal pit; the invaders have proved themselves the mere enemies of peace, of innocence, and of happiness; and the name of Frenchman, for a succession of ages, will probably here be felt to denote all that is wanton in lust, all that is fiend-like in cruelty.

Manners and Customs.] The houses of the nobility and gentry are capacious and often elegant; but the others, both in cities and in the country, are small and miserably built. The Spanish inns are not very numerous, but they are every where dirty and destitute of conveniences. In many, the traveller is obliged to provide and cook his own victuals. The wealthy Spaniards are extremely averse to living in the country, and this is the reason why there are so few cheerful villas, handsome farmhouses, and fertile thrifty farms.

The dress of the Spaniards is subject to little variation. The cloak, the long sword, and the large round hat, are national fashions, which even an arbitrary monarch could not alter for the more elegant modes of France. Black is the favorite color. Those who adopt the French dress make choice of the most lively colors, and it is not uncommon to see men of 50 dressed in red, or sky-blue silk.

The Spaniards are often indelicate and gross in their conversation. In their language and their topics they use a degree of freedom unknown in most other countries. Loose innuendoes, voluptuous descriptions, equivoque and obscenity are not only pardoned, but uttered by ladies of distinction in mixed companies. Both sexes are extremely fond of dancing, and possess the greatest

aptitude to excel in the art. The favorite dances are the *fan-dango*, and the *seguidilla*, both decidedly of Cyprian origin, and wholly offensive to the eye, even of decency. They are also devoted to music, and balls, and concerts, and conversation parties, are their chief social amusement. They rarely assemble to eat at each others houses. Few of them are fond of the chace. Throwing the bar is the most customary sport of the common people. But the bull-fights are the favorite national amusement. These take place in amphitheatres, prepared for the purpose, and usually in the summer. The animal is first attacked by horsemen, armed with lances; then by men on foot, who carry a kind of arrow, terminated like a fish-hook. These give the animal exquisite pain, and redouble his fury. When the bull is almost exhausted, a man, called the *matador*, advances alone with a long knife, and usually with a single blow terminates his sufferings. If the animal appears deficient in spirit, a pack of dogs is let in; several of which are commonly killed before their purpose is accomplished. Frequently six or eight of the horses are killed in a single fight, and sometimes, though rarely, one or more of the human combatants. In spite of the wanton cruelty of this amusement, both sexes, of every age and rank, crowd to a bull-fight day after day with enthusiasm, and gentry and nobles do not disdain to appear as combatants.

The Spaniards are generally short, thin, and well-proportioned. Their complexion is olive. Their manners are grave and slow, but graceful. They are distinguished for their national and personal pride. These prevent them from stooping to the more grovelling vices. They are credulous, superstitious, and bigotted; but at present not intolerant. They are revengeful; but assassinations are less frequent than formerly, and are not common except in Andalusia and Granada. Jealousy was formerly a common characteristic of the nation, but it has been succeeded by a more criminal indifference. One of the most striking of the present national manners and customs is the common practice of adultery, under the mask of religion. The *cicisbei* first appeared as a distinct class of men in Italy several centuries since, and were soon found in Austria, Spain, and Portugal. In France they were unnecessary. In Italy they are usually gentlemen. In Spain they are often monks and ecclesiastics. They are called *cortejos*, and often discover a singular degree of fidelity and constancy in their criminal attachment.

In general the Spaniards are patient, cautious, distinguished for their sobriety and temperance, charitable, friendly, faithful, and strictly honest in their dealings. They are obedient to the laws, and willing to undergo any sacrifice for the honor of their country.

The manners of the different Provinces, have each also their particular character. The Catalans are the most industrious, active and ingenious. They are fond of property. Their manners are rude and vulgar. The Valencian is mild and supple in his manners, idle, subtle, and false. All the mountebanks and tumblers come from Valencia. The Andalusian is well made, nimble,

lively, idle, vain, extravagant, and licentious. The Castilian is haughty, grave, distant, dignified, mistrustful, and usually well informed and intelligent. The Galicians leave their own country, and are employed in the rest of Spain, in the lowest occupations, as in sweeping chimneys, and cleaning shoes. Most of the servants are Asturians : they are faithful, not very intelligent, but exact in the performance of their duty.

Language.] The Spanish is chiefly derived from the Latin, and resembles it more than the French or Italian. Many of the words however are of Arabic, and some of Gothic origin. The Moors resided so long in Spain, as not only to communicate to the language many of their words and expressions, but also gave it much of the slow formal manner of the orientals. The speech is grave, sonorous, of superior dignity, and of exquisite melody. The dialect of Castile is by far the purest. The Biscayans speak an entirely different language from the Castilian. It is of Gothic derivation. The Asturian dialect is said to resemble it, and, in a smaller degree, the Galician. There are serious varieties in those of the other provinces.

Literature.] During the long Roman domination Spain received so many colonists from Italy, that she became at length scarcely inferior to it in civilization and learning. Some of the best Latin writers were natives of Spain. Among these may be mentioned Quintilian, Lucan, Martial, Pomponius Mela, Silius Italicus, and Seneca. The Spaniards had translations of the best Greek and Latin classics before the close of the 15th century, which was long before they were translated in France or England. Isidore of Seville may be mentioned among the fathers of literature in this country. He flourished in the 7th century, and wrote in Greek ; and is inferior in merit to few of his contemporaries. Under the Caliphs of Cordova flourished many celebrated writers. Among these may be mentioned Averroes, Aben Zoar and Rhazes. The History of Spain by Father Mariana, to the reign of Ferdinand the Catholic is written in an admirable style, and generally with accuracy. The chronicles of Ferreras de Saavedra are in great estimation. The History of Catalonia, by a bishop of Lerida, is no contemptible imitation of Livy. The best memoirs are those of the Marquis of Saint Philip, on the war of the succession. The History of Mexico by Antonio Solis is translated into every European language. The Conquest of Peru, by Garcilasso de la Vega, is exact, but dry and uninteresting. Hermondez's History of the Indies ought also to be mentioned for its admirable simplicity. Francisco Perez Bayer, author of a dissertation on the Phenician language, stands in the first list of Spanish literati. The Spaniards have been distinguished for their success in compositions of gallantry, in fables, and ingenious fictions. For narrative invention they are not rivalled by any European nation. The plots of their fables, their comedies, farces, novels, and romances, are original ; and have been borrowed by the Italians, French, English, and Germans. Cervantes will always be the first model of satirical and humorous narrative. Their best comic

poets are Lopez de Vega, Roxas, Solis, Moreto, Arellano and the immortal Calderon. Ercilla was a soldier in Chili, when he wrote his *Araucana*. The other distinguished poets are Luis de Leon, Quevedo, and Villegas.

The best English and French works on morality, history, and philosophy are translated into Spanish. In philosophy the native authors have not excelled. For some time past the nation has not been distinguished by its progress in learning or science.

Universities.] The Spanish universities are 22 in number. Six of these were devoted to the education of young men of family. The privileges they enjoyed became a source of abuse, and in 1777, they underwent a thorough reform. The University of Salamanca has a library of more than 20,000 volumes, and in 1785 contained 1909 students. The Logic of Aristotle, and the Theology of Thomas Aquinas are still taught in all the universities. There are academies for the laws of Spain, for the canon law, and for medicine at Madrid; for the belles lettres and for medicine at Seville; and academy of the arts at Valencia and Saragossa; one of geography at Valladolid; one of mathematics and drawing at Granada; and one of belles lettres at Barcelona.

Cities.] According to Hassel there are in Spain 145 cities, 4,364 borough towns, and 9,293 villages.

Madrid, the capital of Spain, is built on a small stream called the Manzanares, which empties into the Xarama, a tributary of the Tagus, in lat. 40° 25' N. and 3° 12' W. It continued an obscure town in Castile, till Charles V. made it the royal residence. It has no fortifications nor ditches, being only surrounded by a bad wall with 15 gates. The streets are not at right angles, but they are almost all straight, wide, clean, and well paved. It has also several squares, or areas, not very spacious or regular; but the Plaza Mayor is distinguished for its beauty and regularity. It is 1536 feet in circuit, and inclosed by 136 houses, of five stories, ornamented by balconies which are supported by pillars. This is the scene of the bull-fights, and public executions, and was formerly of auto-da-fés. The streets and squares are adorned with fountains, the water of which is excellent, and the air of the town is very pure and healthy. Madrid contains 18 parishes, 35 convents of monks, 31 of nuns, 39 colleges and hospitals, 14,100 houses, and 156,672 inhabitants. The houses are chiefly of brick, and several are large and handsome. The Manzanares, which runs W. of the town, a small distance from its walls, in winter is a torrent, but dry in summer. There are two bridges over it, one leading to Segovia, the other to Toledo. Among the edifices the Palace of Madrid, on the west side of the town, near the river, deserves the first mention. It is new, and presents four fronts of 470 feet each, and 100 in height, enriched with numerous pillars and pilasters. In the middle is a spacious court, around which are large piazzas. The audience chamber is a double cube of 90 feet, hung with crimson velvet, and adorned with sumptuous canopy, and painted ceiling. In almost every room are suspended numerous portraits, and other paintings, the works of the first

masters. The palace of Buen Retiro, on the east side of the town, is very large, but destitute of beauty and magnificence. It fronts upon the Prado, a public walk, a mile and a half in length, which has long been famous in Spanish comedy and romance. It is planted with trees, and adorned with statues and fountains. Several of the principal streets terminate on it. That of Alcala, the widest in Europe, crosses it, and runs by the side of the gardens of the palace. The churches of Madrid are not distinguished for their architecture. Those of St. Pasqual, St. Isabella, and the Carmelites, contain collections of pictures, which cannot be seen without admiration. Madrid has little trade, and prospers chiefly by the presence of the court. The royal manufactures of china and salt-petre are established here. The environs of Madrid are far from being handsome, and entirely unadorned with palaces and villas.

Barcelona, a sea-port of Catalonia, was built by Amilcar Barcas, father of Annibal 250 B. C. and was called by him Barcino. It stands on a plain open to the S. E. but protected by hills on the N. and W. It is surrounded by a double brick wall with 14 bastions, hornworks, ramparts, and ditches. The old and new town are separated from each other by a wall and ditch. The streets are narrow and crooked, and the churches are rather rich than beautiful. The arsenal is of large extent, and a prodigious gallery, containing 28 forges, has been erected in it within a few years. The other chief edifices are the cathedral, the church of Notre Dame, the exchange, and the palaces of the bishop, the governor, that for the deputation of the nobles, and that of the inquisition. The hospital contains 1,400 industrious poor. The town contains 8 parishes, 10,183 houses, and 111,410 inhabitants. The inhabitants are industrious and hospitable. The women are distinguished for their beauty, their vivacity, and their freedom from restraint. The harbor is spacious, deep, and secure. A mountain called Montjoui rises near the city, in the middle of the plain, runs into the sea in the form of a promontory, is covered with vineyards, gardens, and groves, and a strong fort, and furnishes a quarry of fine hard free stone. On the other side of the entrance is a large mole, with a light-house and fort at the extremity. This is the second commercial town in Spain. It has extensive manufactures of silk, cotton, wool, glass, cutlery and fire arms, and a noble foundry of cannon. The imports are corn, codfish, woollens, silks and stockings; the exports wine, brandy, cloth, and leather.

Valencia, called *Julia Colonia*, and afterwards *Valentia*, was built by Junius Brutus, a Roman consul about A. U. C. 677. It stands on the Guadalaviar, about half a league from its mouth. The streets are narrow, but every where clean, and the appearance of the town is pleasing. Here are a military school, a public library, and 45 convents. Fine edifices are not numerous. The chief are a large cathedral, and the church of the Patriarch, both richly ornamented with paintings, and the temple, a church entirely modern, and built in a simple and noble taste. The silk-manufactures of this city are some of the most extensive in Europe. About 4000

silk looms give employment to more than 20,000 of the inhabitants, and consume yearly 627,000 lbs. of raw silk. Here also are manufactured soap, tiles, mats, and cordage. A fine walk along the river passes five handsome stone bridges, and leads to Grao, a little village at its mouth. It has less a harbor, than a bad road without anchorage or shelter. Vessels seldom approach nearer than half a league. The cargoes are there usually put into barks, which are rowed almost to the shore, and afterwards towed by oxen, till they are out of the water. The trade of the city is, however, extensive in wine, brandy, salt, fruits, oil, wool, silk, rice, petasl, soda and barilla. From the mouth of the Ebro, to Cartagena the roads of Alicant and Santa Pola, are the only places where anchoring is safe. The rest of the coast of Valencia is low, dangerous, and exposed to violent east winds. The environs of the city are every where crowded with villages and orchards in the midst of a fertile and beautiful country, and the top of a very lofty tower in the city gives one of the most beautiful prospects in Europe. Population, 105,000.

Seville, the *Hispalis* of the Romans, the *Hispania* of the Goths, and the *Ixbillia*, of the Moors, was built long before the Romans ventured into Spain, but when, or by whom, is uncertain. It stands in the midst of a large circular plain, on the south side of the Guadalquivir, 54 miles from its mouth, in the midst of a country well cultivated and adorned with orchards and villas. It is surrounded with walls, flanked with towers. It is the most extensive city in Spain, and contains 30 churches, 90 convents, a university, several hospitals and free schools, an exchange, and a mint, 13,500 dwelling houses, and 80,268 inhabitants. When Ferdinand took Seville from the Moors, it is said to have had a population of 400,000 souls. The streets are irregular, and many of them very narrow. The houses are frequently built upon poles, and are generally of a mean appearance. Seville is the see of an archbishop, the seat of an audienza real, and of a tribunal of inquisition. Here are considerable manufactories of salt-petre, verdigrise, leather, silks, cloth and gold lace, and a foundery of cannon. Ferdinand IV. in 1757, established in this town a royal tobacco manufactory, at an expense of 30,000,000 rials. The chief building is a square of 750 feet, two stories high constructed of a white stone. From 1500 to 2000 persons are here daily employed, and 80 mills are worked by 100 horses or mules. All the tobacco of Spain is prepared here. The Guadalquivir is navigable by ships of burthen to this place; but thence to Cordova only by small craft. It was the seat of the American commerce, till 1717, when it passed to Cadiz. The exports are tobacco, wool, oil, saffron, wine and lemons.

Cadiz, the *Gadir* of the Tyrians, and the *Gades* of the Romans, was built by the former nation, about 40 years after the founding of Rome, and was soon transferred to the Carthaginians, who held it several centuries before their conquest of Spain. It is built on the N. W. extremity of a long sandy peninsula, which is connected by a very narrow isthmus with the isle of Leon. This island is 10 miles

in length, and is separated from the continent by a winding narrow strait, which at its N. E. end opens into the harbor of Cadiz. The harbor stretches from E. to W. and opens northwards between Forts Matagordo and Lorenzo, or the *Puntales*, into the Bay of Cadiz. Both the Bay and harbor are secure and spacious. The Rota, and Fort St. Sebastian defend the entrance of the bay. Fort St. Catherine is farther in, and Cantera and St. Banez are inside of the harbor. On the S. side a high and steep shore, on the N. rocks and sand banks, and on the west a ridge of rocks render it inaccessible from the Ocean. Very strong fortifications secure it from an attack by the isthmus. The city is nearly a square. The streets are narrow, yet well paved and clean. Two large open squares contribute to ornament and health, and the rampart affords an airy and delightful promenade. The houses are well built, and very lofty, and have flat roofs, which are covered with a white cement. The population in 1802 was only 57,387. Thirty years before, it was estimated at 80,000, and in 1787 it was 67,987. Many of the inhabitants are foreigners. Of these the Irish, Flemings, Genoese, and Germans are most numerous. There are also a few French, English, and Dutch. This town for 90 years has been the emporium of the American trade, and is the most commercial in Spain. Its commerce employs about 1000 vessels, of which nearly one tenth are Spanish. The exports to America in 1784, amounted to £3,621,443, sterling ; the imports in money and jewels, to £8,297,164 ; and in merchandize, to £2,990,757. This last consisted of cochineal, indigo, cacao, sugar, hides, vicugna wool, cotton, copper, tin, tobacco, and various kinds of wood. Ribbons and linen are manufactured here extensively, and wax is refined. Salt also is made in vast quantities on the other side of the bay, with little labor and expence. The chief edifices are the two cathedrals, the custom-house and the theatre. All the necessaries and luxuries of life abound here, and are very cheap, except fresh water, which is brought from across the Bay. Considerable inconvenience has been experienced from this source during the present siege of Cadiz by the French.

Granada, anciently *Iliberia*, a municipal town of the Romans, and a city of very early date, stands at the foot of the snow-topped Sierra Nevada. It is built on two hills, which are separated by the Darro, and its walls are washed by the Xenil, a tributary of the Guadalquivir. The two streams unite in the lower part of the town. To the S. and W. lies a very extensive plain, covered with fertile farms and thrifty orchards, and interspersed with pleasant towns and villages. It had formerly 20 gates, of which only 12 remain. The streets are narrow, irregular, and badly paved. Few of the houses are splendid. They are about 12,000 in number, and the population in 1787, was 52,345. There are here 24 churches, 4 convents, 13 hospitals, and a university. Among all their losses in Spain the Moors are said to lament nothing but Granada, and in their evening prayers they supplicate Heaven to restore it to their possession.

Murcia was a small Carthaginian village, till the time of Scipio.

The Romans dedicated it to Venus on account of its myrtles and fountains. It stands on the N. side of the river Segura, about 20 miles from the Mediterranean, in a delightful valley, 25 leagues long from E. to W. and a league and a half broad. The environs are adorned with gardens and orchards of mulberries, and Venus might still own it for its myrtles. The town contains 6 parish churches, a cathedral, 16 convents, and a large library, but not a single inn. The population is 44,000. The river is decorated with a fine stone bridge, and a magnificent quay. This city belonged to the Romans 616 years, to the Goths 310, to the Moors 527. They lost it in 1241.

Saragossa, the ancient *Cæsaria Augusta*, and the present capital of Arragon, stands in a fertile plain, on the southern bank of the Ebro, which by its windings renders the neighborhood extremely rich and delightful. The streets are long and broad, but dirty and ill-paved. Here are two cathedrals, 15 parish churches and 10 convents; also some distilleries, and manufactories of silks, cottons, and hats. The university has been mentioned. Population 42,000.

Malaga, in the W. part of Grenada, was built by the Phenicians, who called it *Malacha*, from the quantities of salt-fish sold there. The harbor is safe and commodious, being protected by an expensive mound running 1200 feet into the sea. The town stands at the foot of a high mountain, and is small, but handsome. It contains 5000 houses, and in 1808, 41,982 inhabitants.* The neighboring country is peculiarly fertile in vines and fruits. The exports are wines, brandy, raisins, oil, lemons, figs, almonds, sweetmeats, and black sarsnet, to the amount of £400,000. The imports are wheat, barley, linens, stockings, woollens, cheese, butter and fish to the amount of £200,000. The cathedral is elegant and noble.

Ferrol is a strong fortress and seaport on the Bay of Corunna, or the "Groyne," with one of the best and safest harbors in Europe. It is one of the stations of the navy, has a large sea-arsenal, the most important dockyards and sail-cloth manufactories in the kingdom, and a large marine hospital, capable of receiving 5000 patients. It had in 1793, 30,000 inhabitants, and as late as 1752, was merely a collection of fisherman's huts.

Carthagena, in Murcia, anciently *Nova Carthago*, was built by Asdrubal the brother of Annibal, B. C. 229. The environs for some distance are crowded with villages, farms, and country seats. High mountains and barren rocks protect the town on the S. and W. On the N. and E. it is open. The harbor is the best in Spain, deep, well sheltered and well defended; and affords a fine fishery. The streets are wide, and the houses commodious. They have flat roofs, affording an agreeable retreat after sunset. In the middle of the city is a high hill, with a fort. The trade is in silks and barilla. Esparto ropes and cables are manufactured here. Population 29,000. This is a station of the royal navy.

* Hassel.

Ecija, in Andalusia, is delightfully situated on the banks of the Xenil. It has 6 parish churches, 8 chapels, 20 convents, 6 hospitals, 6000 dwelling houses, and 28,176 inhabitants. The town plat is large, the houses are well built, and the environs abound in villas and plantations of olive-trees.

Jaen, in the same province, on a small tributary of the Guadalquivir, is built in a country fertile in corn, wine, oil, silk, and excellent fruits. It is surrounded with walls, and has several beautiful churches and convents. Population 27,500.

Toledo, in New Castile, anciently *Toletum*, 42 miles from Madrid, is built on a rock of granite that is almost surrounded by the Tagus. The town is large, but the streets are solitary, and many houses are in ruins. Toledo was formerly the capital, and contained 200,000 inhabitants. It has now but 25,000. The Toledo rapiers were once celebrated for their temper, and the secret of hardening them is said to have been lately recovered.

Valladolid, in Leon, is an ancient handsome town, on the Pisuerga, containing 15 churches, 16 convents, and 24,000 inhabitants. An annual fair is held here, and the streets are lively and full of business.

Lorca, in Murcia, stands on a hill round which flows the Guadalestine. It is a large, but decayed city, containing 2000 houses, and 21,866 inhabitants.

St. Jago di Compostella, the capital of Galicia, stands in a beautiful valley on all sides surrounded with hills, between the Tambre and Ulla. The public squares and churches are magnificent, and the dwelling houses well-built. It contains a cathedral, 11 parish churches, 12 convents, about 2000 houses, and 21,334 inhabitants. The belief that the body of the apostle James was buried here, formerly drew hither multitudes of pilgrims from all parts of Christendom, and still draws a few zealous catholics from Spain.

Orihueta, on the Segura, in Valencia, stands in a delightful plain, environed with mountains, and fertile to a proverb. Its manufactures of silk and salt-petre are considerable. Population 21,000.

Cordova, in Andalusia, the ancient *Corduba*, and the birth place of both the Senecas, and of Lucan, is built in a semicircular amphitheatre, inclosed by a branch of the Sierra Morena, on the north bank of the Guadalquivir. On the opposite side lies an extensive and fertile plain. The bridge is of stone, a Moorish structure. It contains 26 churches, and 40 convents, many of the houses are deserted, and many in ruins. The streets are long, narrow, and ill paved. Population 20,274. There are many vineyards and gardens in the town, and the country around abounds in orange and lemon groves.

Alicant, in Valencia, is built between a mountain and the sea, and is well defended by strong bastions; it has a good harbour, and an extensive commerce. Population 17,435. *Elche*, a few miles south, contains 17,403 inhabitants.

Of the most noted smaller towns, *Bilboa* has 13,000, *Burgos*, 10,000, *Badajos* 10,000, *Lerida* 16,818, *Pampeluna* 14,054, *Salamanca* 15,000, and *St. Sebastian* 12,000.

Edifices.] The palace and monastery of the Escurial have been described at great length by many travellers. It is seated in a deep recess, at the foot of high mountains; and was built by that bigot Philip II. in the strange form of a gridiron, the instrument of the martyrdom of St. Lawrence, upon whose anniversary the Spaniards gained the victory of St. Quintin. The convent is 740 feet by 580; and the palace forms the handle of this imaginary gridiron. The paintings are excellent and numerous; and the vault containing the royal tombs is grand and impressive. But the palaces of Aranjuez and St. Ildefonso are greater favourites with the court. The gardens of the former, watered by the Tajo, are laid out in a just and natural taste. St. Ildefonso is a summer residence exposed to the north.

Manufactures and Commerce.] The most flourishing period of Spanish manufactures was the reign of Charles I. At that time Segovia and Seville were the greatest manufacturing towns in Europe, and Spanish silks went every where, even to the Levant. There are now respectable woollen manufactures at Segovia, Seville, Guadalaxara, and several other places, that produce broad-cloths, blankets, flannels, and other articles of a good quality. Cotton manufactures are also found, especially in Catalonia. The silk manufactures are the most important and flourish most in Catalonia and Valencia. Great quantities of silk however are smuggled in from France. At Cartagena, Ferrol, and other places are considerable linen and sail cloth manufactories; but the greater part of these articles is supplied from abroad. Manufactures of leather are found in every considerable town, and most of the small ones. There are about 200 paper mills in Spain, the most and best in Valencia; where china is also manufactured, which rivals that of Saxony. The salt-petre works, powder-mills, and tar ovens, yield nearly a sufficient supply. Soap manufactories are found every where. The Tobacco manufactory of Seville is the largest in the world. The best dockyards are at Seville, Malaga, Alicant, Barcelona, and St. Sebastian; and ship-building is reviving. Salt is made in immense quantities in Valencia, and Andalusia. Manufactures in metals are almost wholly neglected. All sorts of hardware, and most of the furniture and tools that are used, are imported from France and England.

The inland trade has been latterly much facilitated by the introduction of a unity of measures, weights, and coins, throughout the kingdom, by the removal of various burthens, by the improvement of the roads, and by the construction of canals. Still it is chiefly in the hands of the rich. The poverty of the husbandman often compels him to sell his harvest before it is sown, at an enormous discount. The foreign trade is mostly carried on by other nations. Spanish ships sail to the ports of the Mediterranean, and to the colonies of Spain. The chief imports are hardware, corn, butter, cheese, fish, (upwards of £1,000,000 sterling annually,) furniture, quicksilver, guns and other arms, timber, linen, sail-cloth, cordage, flax, hemp, wax, paper, millinery, sugar and spices. The chief exports are wool, (nearly £1,000,000 sterling annually,) *etc.*

raw and manufactured silks, wine, raisins, brandy, figs, lemons, salt, iron, saffron, horses, tobacco, cork, soda, barilla, (150,000 quintals,) rice, (£250,000 sterling,) saltpetre, and various American goods. The balance of trade is greatly in favor of Spain. In 1784 the imports from America amounted, in money and jewels, to £9,291,237, in merchandize, to £3,343,936, the exports to £4,348,078. In 1796 the exports to Great Britain, were £809,881; the imports £546,126.

It will readily be seen, that almost all we have already said respecting Spain, is predicated on a period of quiet and order, and that few things capable of change, can remain unaltered in the present season of uproar and misrule.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, MOUNTAINS, BOTANY, ZOOLOGY, MINERALS.

Climate.] MANY of the highest mountains are covered with perennial snow. The winter is very mild in the low and southern districts, where it seldom freezes; but in the higher tracts, the winter is often as severe as in England or Germany. In the south, the air is hot and damp during the summer; in the north it is cooler and drier; but every where liable to sudden changes. On the whole, the climate is less salubrious and less favorable to longevity, than that of the more northern countries of Europe. Infectious and malignant fevers originate and prevail in the south, and sometimes sweep off great numbers. On the Mediterranean the sea-breeze blows every day from 9 till 5 o'clock; and pleasantly tempers the warmth of summer. The south wind from Africa, called the *Salano*, is oppressive and unwholesome; but the *Gallego*, a N. W. wind, from the mountains of Gallicia, is cool and refreshing. In many parts the trees retain their verdure all the year, and where the leaf falls it buds again in January.

Face of the Country.] Spain is probably the most mountainous country in Europe. The western part of New Castille is open and plain. The centre of Arragon is level and sandy. Valencia and the northern half of Murcia, consist chiefly of extensive plains and vallies, every where fertile and well cultivated. The rest of the country is rough and broken. The highest mountains are chiefly destitute of vegetation, and their tops are always white with snow. The lower eminences are, still, almost universally forested, and in this respect resemble the mountains of New-England. The rivers and streams are numerous, and, with the exception of New Castille, the country is well watered.

Soil and Agriculture.] The soil is generally light and rests on beds of Plaster of Paris, which is itself an excellent manure. Near the shore, and along the banks of the rivers, it is generally

more fertile than in the central districts. The two Castilles, Biscay, Navarre, Arragon, and especially Galicia, and Leon, have an indifferent soil ; yet susceptible of high fertility under skilful and vigorous husbandry. Asturia, Estremadura, and the Mediterranean provinces ; especially Andalusia and Valencia, have natively an exuberant fertility, and, with moderate cultivation, yield many of the luxuries of life. In the vale of Valencia wheat yields from 20 to 40 for one ; barley from 18 to 24 ; oats from 20 to 30 ; maize 100 ; and rice 40. The Provinces on the Mediterranean, except Andalusia, especially Valencia and Granada, are under high cultivation, as are also Galicia, Asturia, Biscay and Navarre. The agriculture of the other provinces is much neglected. Leon is merely a sheep-pasture. And large uncultivated tracts are spread over New Castille, and the other provinces. In this part of Spain the villages are large and at a distance from each other, and the country between them, except about a league round each, is merely a forest or a barren. Frequently there is not a single habitation in the space of four, five, or six leagues. The vine, the olive, maize, wheat, rye, barley, hemp, flax, and saffron, are cultivated in every province. The best wine districts are New Castille, La Mancha, in particular ; Malaga, Seville, Cadiz, Valencia, Arragon and Navarre. Of the three sorts of Malaga wine, *Malaga, Mountain, and Tent*, about 30,000 ankers are yearly exported ; and of the *Xeres* or *Sherry* wine, about 20,000 pipes. This is made at Xeres de la Frontera, 10 miles N. E. of Cadiz. A great part of the wines made in Spain is distilled into brandy ; of a quality, however, much inferior to the French. The best raisins are made of the grapes of Malaga, Alicant, Valencia, and Granada. Biscay and Asturia abound in orchards, and make the best of cyder in great quantities. The northern provinces raise great quantities of cattle. The sheep are of two kinds, the *travelling* or *Merinos*, estimated at 5,000,000 in number, and the *stationary* at 8,000,000. The first winter in the Sierra Morena, and in the month of May travel northward in flocks of 10,000 to the mountains of Old Castille. They yield the finest fleeces, which in 1792 amounted to 11,250,000 lbs. of clear wool. The stationary abound in various provinces, particularly Leon and Estremadura. The mule is the usual beast of burden in Spain. Goat's milk is generally used instead of cow's milk, and oil instead of butter. Rice is cultivated chiefly in Catalonia and Valencia ; sugar in Granada, honey there and in Andalusia ; cotton and the best olives and oil in the south. The *salicornia*, or shrubby glasswort, is raised extensively in the S. E. coast. It is sown in plowed or well-manured fields, near the sea or salt-lakes ; it is reaped in the same manner as hay, tied up in bundles and burned in covered holes in the ground. Under the ashes the barilla is found in firm lumps. The Spanish potatoes, artichokes, asparagus and other products of the garden are excellent ; but horticulture is much neglected.

Rivers.] The only large river that falls into the Mediterranean in Spain, is the Ebro, the ancient *Iberus*. It rises in the Asturian mountains, and pursues a S. W. course through Old Castille, Na-

varre, Arragon, and Catalonia. Its length is about 440 miles. It begins to be navigable at Tudela; and its water is remarkable for its salubrity. The chief branches are *Arga* from Navarre, the *Xiloca* from Arragon, and the *Sagre* from Catalonia. The smaller rivers that fall into the Mediterranean are the *Guadalaviar*, (*Turias*,) at Valencia; the *Xucar*, (*Sucro*,) below Alzira; and the *Segura*, (*Terebus*) below Orihuela.

The *Guadalquivir*, the ancient *Baetis*, rises in New Castille from the Sierra Morena, and runs S. W. through a corner of Granada, and through Andalusia, to the Atlantic, at St. Lucar de Barzameda, about 20 miles N. W. of Cadiz. Its length is about 340 miles. Anciently it is said to have had a southern arm which emptied at Cadiz. The *Xenil* (*Singulis*) its principal branch runs by Granada, and falls in about a league below Ecija.

The *Gaudiana*, the ancient *Anas*, rises in the mountains of Toledo, and runs S. W. through New Castille and Estremadura, to Badajos, where it enters the province of Alentejo in Portugal. Thence its course is S. W. and then S. E. till at length it becomes a boundary of the two kingdoms, separating Algarve from Andalusia, and falling into the Atlantic, after a course nearly equal to that of the *Ebro*. It is navigable to Mertola, about 45 miles.

The *Tagus*, or *Tajo*, rises in the mountains of Molina, the western boundary of Arragon, near Albarracin, and runs W. S. W. through New Castille and Estremadura, to Alcantara. Here for 20 miles, to Errera, it separates Estremadura from Beira, in Portugal, where entering that kingdom it flows through Estremadura to the Atlantic by a mouth 4 miles broad forming the harbor of Lisbon. Its course is rapid and the upper part impeded by cataracts. Its length is about 520 miles, and it is much the largest river of Spain. The tide flows up to Santarem, and the river is navigable for flat vessels about 20 miles.

The *Douro*, or *Duero*, the ancient *Durius*, rises in the Molina, and runs westward through Old Castille and Leon, to Miranda. Thence it runs S. W. between the two kingdoms, about 80 miles, separating Leon from Tras-os-Montes. Here it enters Portugal, and runs westward to the Atlantic, into which it falls a little below Oporto. Its whole course is about 400 miles.

The *Minho*, the ancient *Mimus*, rising near Mondonedo in Galicia, runs S. W. 180 miles to the Atlantic, into which it falls 15 miles below Tuy. For about 40 miles it constitutes the northern boundary of Portugal. Its waters abound with excellent salmon and sturgeon. Its current is gentle, and it is navigable about 25 miles. A bar at the mouth prevents the entrance of large vessels.

The *Tinto* is a little river falling into the Atlantic about 25 miles N. W. of the *Guadalquivir*. Its water is said to be of a deep yellow color, and to have very singular petrifying powers. It withers all verdure on its banks, and no kind of fish live in its stream.

Mountains.] The Pyrenees between France and Spain have already been described.

The Northern, or Cantabrian chain, commencing near Cape Finisterre, runs through Galicia, south of Asturias and Biscay, and

through Navarre, till it joins the Pyrenean chain, of which it is merely a continuation. It is called in different parts, the Mountains of Mondonedo, Asturias, and Biscay, and no where contains very lofty summits.

The *Sierra de Molina is a range branching from the Cantabrian in Old Castille, and running S. E. through that province, and between New Castille and Arragon, and advances towards the Mediterranean in the N. of Valencia.

The mountains of Guadarama break from the last mentioned chain in a W. S. W. direction, separate the two Castilles, and crossing the northern part of Estremadura enter Portugal, across which they run in a S. W. direction nearly to Cape Roca. In Portugal the chain is called *Serra d' Estrella.

The mountains of Toledo, farther south, run nearly parallel with these between the Tagus and Guadiana, across Estremadura and New Castille, and unite also with the range of Molina.

The Sierra Morena, a third parallel range between the waters of the Guadiana and the Guadalquivir, separates New Castille and Estremadura from Andalusia, and after being pierced by the Guadiana enters Portugal and serves as the northern boundary of the province Algarve. The chain in Portugal runs from E. to W. the whole width of the kingdom, and is called Serra de Monchique.

The Sierra Nivada, or Snowy Mountains, run between the Guadalquivir and the Mediterranean, nearly parallel with the latter, through Andalusia and Granada; and, at length turn northward, bounding Murcia on the W.

Montserrat, or the Sawed Mountain, so called, on account of its jagged pyramidal summits, lies about 30 miles N. W. of Barcelona. It is a detached solitary rock more than 11,000 feet high, and about $10\frac{1}{2}$ miles in circumference, from the top of which Majorca and Minorca are distinctly visible, at the distance of 50 leagues. It is composed of limestone and gravel united by a calcareous cement. A large convent of Benedictines has been built upon it, to which a miraculous image of the Virgin Mary, discovered by some shepherds in 880, attracts an immense number of pilgrims. All the poor who come here, are fed gratis for three days; and all the sick are received into the hospital. In the convent are 60 monks, who live in a recluse manner, and adhere to very rigid rules of abstinence. Higher up the mountain are thirteen hermitages, each having a small chapel, a cell, a well in the rock, and a little garden. The hermits are chiefly persons of family and fortune, who have retired thither from the world to devote themselves to meditation and silence. A mule is sent weekly from the convent with thirteen baskets of provisions, one for each of the hermits. One of the hermitages is very curiously and awfully constructed between two narrow projections of the rock; and though it is 2500 paces distant from the convent, it impends so much over it,

* *Sierra* in Spanish, and *Serra* in Portuguese, are general denominations of chains of mountains, the successive peaks of which present the resemblance of a saw.

that the music in the church below can be heard very distinctly. This church contains immense treasures of gold and silver, the voluntary spoils of numberless pilgrims ; among other things 640 massy silver lamps, a great number of golden candlesticks, whole rooms filled with busts and statues, and ministerial vessels also of gold. The traveller is surprised to meet with delightful valleys in the midst of these threatening rocks, to find shade and verdure surrounded by sterility, and to see natural cascades rushing from the steepest points of the mountain to fertilize the scattered gardens, and by their unvarying murmurs, to give a deeper gloom to the surrounding silence.

The mountain of Cardona, a few miles N. W. of Montserrat, is an immense mass of rock salt, rising to the height of nearly 500 feet above the surface of the ground, and nearly 5 miles in circumference. The salt is of almost every color, and the various eminences when illuminated by the sun remind one of the mountains of emeralds, rubies, and diamonds in Fairy-land. Vases, urns, and various other utensils are made of this mineral, some of elegant orange, others of violet, green and blue, all beautifully wrought and fearing no enemy but water. Part of the mountain is covered with shrubs, and the top is shaded by a forest of pines.

Botany.] The forest trees of Spain are the pine, the white oak ; the evergreen, sweet oak ; the *kermes* oak, under the prickly leaves of which is found the gall-insect ; the *suber* or oak which produces cork ; the *Encina* or Spanish oak ; the beech ; the walnut ; the lime ; the ash ; the yew ; the larch ; the holly ; the juniper ; the fir ; the carob tree ; the wild olive ; the wild almond ; the sumach ; the laurel ; the bay ; the *laurus tinus* and Portugal laurel ; the great palm-tree, abounding in Valencia, and bearing dates of from 15 to 25 lbs. weight ; the Indian fig tree ; the cornicabra or turpentine tree, susceptible of a fine polish, and manufactured into snuff-boxes ; the box, and the chestnut.

The fruit trees are the apple, pear, cherry, peach, apricot, mulberry, olive, lemon, palm, fig, orange lemon, and pomegranate. Whole forests are seen of these, and the fruit possesses a richness of juice and flavor not surpassed by that of Italy.

In the heaths are found the thyme, the lavender, sage and rosemary ; the dwarf myrtle and the cistus : in the dry thickets the fan-palmetto, yellow laurel, Spanish broom and white broom : and in the moister grounds, the asphodel, yellow amaryllis jonquil, violet, orange and martagon lily, white tulip, oleander, tamarisk and myrtle. Samphire, tree-violet, tragacanth, vetch and caper-bush overspread the rocks on the shore ; and on the sands are found the sea-daffodil, the salicornia, or shrubby glasswort ; and the esparto-grass, out of which is made the most durable kind of mats and cordage.

Zoology.] The Spanish horses are famous for their beauty and elegance of shape, in which they surpass even the African horse. The Andalusian are the finest. Those of Asturia are highly esteemed for strength and swiftness. The whole cavalry is mounted on stallions ; mares are not much valued, being generally

employed for breeding, and threshing corn. The best mules are found in La Mancha. The ass of La Mancha is a very large race peculiar to that province. The breeding of horned cattle meets with little attention. Those of Estremadura are the best. The wild bulls of Andalusia are employed in the bull-fights at Madrid. The Spanish sheep have been mentioned. Since the French invasion great numbers of the merinos have been transported to England and the United States. Goats are found every where : immense flocks of them browse in the neighbourhoods of the large towns. Hogs are very generally bred ; they are usually black, with curled bristles, and go all the year in the woods. Rabbits, and every kind of poultry, are raised in the greatest abundance. Wolves are found in immense numbers on the Pyrenees ; and deer and almost every species of game abound in the forests.

Minerals.] Spain was anciently celebrated for its mines of gold and silver, which were long wrought by the Carthaginians, and proved the sinews of their wars. But since the discovery of similar mines in America, those of Spain have not been worth working, and now lie neglected. The iron, copper, tin, lead, and quicksilver mines, on the contrary, are worked with great advantage, though mostly by English, French, and German miners. The Spanish iron is esteemed for its elasticity and softness ; Biscay in particular is rich in this metal, where the ore yields from 30 to 40 per cent, pure iron. Most of this metal was formerly sent abroad to be manufactured, but latterly the Spanish cannon have been cast at Lierganes and Cavada, the fire-arms have been made in Guipuscoa and Placentia ; and cast-iron from the forges of Eugui and Muga. In Navarre and Catalonia are the best copper mines. A great part of the copper is manufactured into verdigris. At Linarez, in Jaen, there are lead mines so uncommonly rich, that the ore yields from 60 to 70 per cent : they are worked for the government, and contain immense quantities of this metal. In Catalonia and Arragon, tin is found in the greatest quantities. It is equal to the English. The richest quicksilver mines are at Almada, in La Mancha. They are worked by German miners, and yield annually 18,000 cwt. of mercury. All this, with that obtained from Andalusia, is transmitted to America. Calamine appears near Alcavas, cobalt in the Pyrenees, antimony in La Mancha, arsenic in various places. Coal is met with in Asturia and Catalonia, sulphur in Murcia, amber, jet, lapis-lazuli and asbestos, in Asturia, turkois stones in Leon, garnets and hyacinths in Granada, fine marble there, and in Arragon. Alabaster, free-stone, pipe-clay, and fuller's earth are also common, and gypsum is as abundant as chalk in England. The salt-works, and rock salt of Spain, have already been mentioned. Salt-petre also is made of the best quality, and in immense quantities, in La Mancha, Arragon, and near Madrid. The works at Madrid furnish about 30,000 quintals annually.

SPANISH ISLES.

Majorca, Minorea, and Ivica, the ancient Baleares, are the chief Spanish isles in Europe.

Majorca, the largest, lies between the other two, 23 miles S. W. of *Minorca*, 46 N. E. of *Ivica*, 92 from *Barcelona*, and 120 from *Valencia*. It is 55 miles long, and 46 broad, containing about 1200 square miles, with a population of 135,900. The N. W. part is hilly, but has many rich and fertile tracts. The S. and E. parts are laid out in arable lands, pastures, vineyards, and orchards. The chief productions are corn, wine, oil, honey, fruits, capers, almonds, figs, saffron, fish, and game. In these articles, and in silk, wool, soap, and salt, a considerable trade is usually carried on with *France* and *Italy*. The inhabitants resemble the *Catalonians* in their manners. The higher order speak Spanish; the lower, the *Lingua Franca*, a medley of Latin, Greek, Spanish, French, and Arabic, and generally spoken on the Mediterranean coasts. The capital, *Majorca*, not long since called *Palma*, is a large and elegant town, on a handsome bay, on the S. W. coast. It has a good harbor, defended by three citadels. The streets are broad, and the squares spacious, and the houses are well built of stone. It contains a university, a magnificent cathedral, and 22 other churches, 6 hospitals, an exchange, a palace, several silk and woollen manufactories, and 29,259 inhabitants. The governor, the audience, and the bishop of the province reside here. *Alcudia*, 32 miles N. W. of *Palma*, has 1000 houses, and 7000 inhabitants, and lies on a narrow neck between two harbors. *Porto Pedro* is a town on the S. E. having a safe and spacious harbor, defended by a fort. The climate of the island is warm, but healthy. There are no rivers, but excellent and numerous wells and springs. The little island *Cabrera*, or *Goat-island*, S. of *Cape Salinas*, is all over mountainous, has one excellent harbor, guarded by a castle, and is a place for exiles.

Minorca is 37 miles by 14, and has about 30,000 inhabitants. The south shore is smooth, the north is rugged, with deep and swampy vales, and many creeks and inlets. Mount *Toro*, in the centre, can be seen 18 miles out at sea. The inhabitants depend on their cisterns for their fresh water. The soil is moderately fertile. The annual value of the growth of the vine is estimated at 30,000*l.* sterling. The fishery on the coasts is valuable, and the oysters are delicious. The minerals are iron, copper, lead, and marble, and great quantities of salt collected in the cavities. The exports are wine, oil, wool, salt, and cheese, and are nearly balanced by the imports. The inhabitants live mostly on vegetables, have a turn for poetry, and are still celebrated as slingers. *Port-Mahon*, the capital, stands at the foot of a mountain on an excellent harbor on the S. E. side. *Civitadella* on the N. W. was formerly the capital. The English owned *Minorca* with one short interruption from 1708 to 1781, since Spain has possessed it.

Ivica is about 35 miles east of *Cape St. Mastin*, 15 miles long and 12 wide. The soil is fertile and produces corn, grapes, figs,

and other fruits, the wild olive and the pine. The inhabitants are occupied in making salt, highly esteemed for its whiteness, of which great quantities are exported. Ivica, the capital, is on the S. E. side. It is little more than a garrison. The little isle of Formentesa lies south of Ivica, and has long been deserted on account of its exposure to the African corsairs. It is now occupied by the wild ass, and an immense multitude of snakes.

THE FORTRESS OF GIBRALTAR.

This fortress, though a part of Spain, has so long been in possession of England, that a separate account of it seems to be proper. It lies at the southern extremity of Spain in 36° 6' 30" N. The name is a corruption of two Arabic words *Gabel Tarek*, or the mountain of *Tarek* from *Tarek*, the Saracen general, who conquered Spain early in the 8th century. It is an immense rock rising perpendicularly about 440 yards, measuring two miles from N. to S. and one from E. to W. On the E. of the rock is the Mediterranean; on the W. Gibraltar Bay, a beautiful sheet of water 9 miles long and 5 broad, receiving several small rivers, more than 100 fathoms deep in the middle, and well defended against every wind. This bay makes a small harbor on the N. W. side of the rock commodious for small vessels. The southern extremity of the rock is called Europa point. The town lies along the bay on a declivity of the rock, and contains about 500 houses chiefly of stone and brick, and in 1806, 8500 inhabitants. They are supplied with fruits, vegetables, and fresh provisions from the coast of Barbary. At the extremity of a rock, which advances into the sea, is a large fort covering a mole, made to facilitate the anchoring of vessels. The garrison consists of about 5000 men with upwards of 300 pieces of cannon. The town of Algeziras, or Old Gibraltar, is 5 miles W. on the opposite side of the bay. A little distance from it is the island of Algeziras. The town of St Roche stands a little N. W. of the fortress of Gibraltar, nearer than which are the ruins of the camp of St. Roche, between which and the fortress lies a deep marsh extending to the very foot of the rock, and affording only a narrow causeway commanded by 100 cannon.

This important fortress first attracted attention as a place of consequence in 712, when it was taken possession of by the Moors, who kept it till 1462. In July 1704 the English under Sir George Rooke took it from the Spaniards and have retained it ever since. In July 1779 commenced the celebrated siege by the combined forces of Spain and France. The reduction of the fortress was a darling object with the former power, and every scheme which ingenuity could devise, which rashness could hazard, or force execute, was tried by the besiegers to no purpose. The siege lasted till February 1783, and General Elliot and his brave companions received the applauses of Europe.*

* For a more full account of this celebrated fortress, see the *Gazetteer of the Eastern Continent*, article Gibraltar.

PORTEGUESE EMPIRE.

1. IN EUROPE.

Portugal.

2. IN ASIA.

Goa and some other settlements in Western Hindostan,
Timor Island,
Macao Island.

3. IN AFRICA.

The Madeiras,
The Azores,
The Cape Verd Islands,
Territories in Congo,
Territories on the S. E. coast.

4. IN AMERICA.

Brazil, now become the seat of the empire.



PORTEGAL.

CHAPTER I.

HISTORICAL GEOGRAPHY.

EXTENT, BOUNDARIES, NAMES, HISTORICAL EPOCHS, DIVISIONS, RELIGION, GOVERNMENT, POPULATION, ARMY, NAVY, REVENUE, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, UNIVERSITIES, CITIES, EDIFICES, MANUFACTURES, COMMERCE.

Extent.] PORTUGAL lies between lat. 36° 56' 34" and 42° 7' 30" N. and between lon. 9° 35' 30" and 6° W. Its length from N. to S. is 360 miles; its greatest breadth in the N. is 150 miles; its least, in Algarve, 90. The area, according to Ebeling, is 35,998 square miles.

Boundaries.] Galicia and a part of Leon in Spain, lie on the N. Leon and Estremadura in the same kingdom, on the E. the gulf of Cadiz on the S. and the Atlantic on the W.

Names.] Portugal S. of the Douro, together with a part of Leon, Estremadura, and Andalusia, constituted the ancient *Lusitania*. The country north of the Douro was a part of the *Provincia Tarraconensis*. After the irruption of the Vandals the Roman divisions of the country were forgotten, and the common name of Spain was given to the whole peninsula. The present name is of modern date, it being first applied to the whole kingdom about the year 1069. Various etymologies have been given of it. Some

insist, that the town Oporto, in the time of the Romans, was called *Cale* or *Gale*, and its harbor *Portus* or *Portu Cale*; and that, as the town became flourishing in the middle ages, the name was given to the circumjacent region, till at length, as the country was gradually recovered from the Moors, it was extended to the whole kingdom. Others assert that Oporto was called *Portus Gallorum* from a large number of Gauls having landed and settled there, and that hence the present name of the kingdom was derived. We think the first account the most probable.

Historical Epochs.] Portugal was a part of Spain, and shared the same fate under the Carthaginians, the Romans, the Vandals, the Visigoths, and the Moors. In the 11th century it began to be a separate state. Since that period its chief historical epochs are the following :

1. The grant of Portugal to Henry, a grandson of Robert first, duke of Burgundy, by Alphonso VI. of Castille, near the close of the 11th century. Alphonso had invited several French princes to join his arms against the Moors. Among these Henry signalized himself by his valor and his many victories. To reward him Alphonso gave him his natural daughter, Theresa, created him count of Portugal, and some time after bequeathed him the country as his absolute property. Henry died in 1112.

2. The erection of the country into a kingdom by Alphonso I. son of Henry, after the battle of Ourique in 1139. The number of Portuguese troops was inconsiderable in comparison of the Moors, and the victory was so decisive and glorious, that the soldiers proclaimed Alphonso king on the field of battle, a title which he ever after retained, renouncing all dependence on Spain.

3. The conquest of Algarve, and the final expulsion of the Moors by Alphonso III. in 1254.

4. The discovery of the passage to the East Indies by Vasco de Gama, in 1498, in the reign of Emmanuel. This at once diverted the trade of Asia from its old channel across the isthmus of Suez, and down the Red Sea, and, at a stroke, destroyed the commercial preeminence of Venice. By the wise and resolute measures of their magnanimous sovereign, the Portuguse in 24 years erected a commercial empire in the east, which, for its extent, its opulence, and its splendor, had had no rival in the history of nations. In the same reign Brazil was discovered, and taken possession of by the Portuguese.

5. The introduction of the inquisition into the kingdom with the consent of John III. A. D. 1526; after which event the monarchy rapidly declined in wealth, in power, and commercial enterprize.

6. The idle expedition of Sebastian the son of John III. into Africa, in 1577, where he and his army were destroyed by Mulcy Moloch, emperor of Morocco. This event so weakened the kingdom, that, on the death of Sebastian's uncle and successor without issue; two years after, Philip II. of Spain found little difficulty in maintaining his right to the throne, and thus the country in 1580 again became a part of Spain.

7. The revolution of 1640, in which John, duke of Braganza,

was declared king by the title of John IV. The Spaniards made frequent attempts to regain the kingdom, particularly after the death of John IV. But his queen acted with great vigor and prudence, forming an alliance with Charles II. of England, from whom she received large reinforcements of men and money. At length the glorious victory of Montes-Claros, in 1665, terminated the war.

8. The invasion of the country by the French in November 1807, and the consequent removal of the Portuguese government, and a great multitude of the nation, to Brazil, on the 20th of that month. Since that event the English, who, from the marriage of Charles II. with the princess Catherine, had been the steady allies of Portugal, have driven the invaders out of the kingdom; and the Portuguese, under the auspices of Wellington and Beresford, have recovered the bravery and the skill with which their fathers fought against the Spaniards and the Moors.

Divisions.] Portugal is divided into the six following provinces, which are geographically arranged from N. to S. with the extent and population of each, as given by Ebeling, in his geography of Portugal.

Names.	Extent.	Population.	Houses.	Jurisdictions.	Cities.	Boroughs.	Parishes.
Entre Douero* {	2,389	817,167	181,593	7	3	24	1,327
é Minho,							
Tras-os-Montes,	3,002	308,984	77,054	4	2	59	711
Beira,	10,082	1,123,245	224,649	11	7	230	1,292
Estremadura,	7,803	876,289	175,337	11	2	115	492
Alentejo,	10,520	339,555	76,246	8	4	105	369
Algarve,	2,192	93,472	25,523	3	4	114	71
Total,	35,998	3,558,712	760,402	44	22	647	4,262

Religion.] The national religion is the Catholic, and the Portuguese have been characterized for their strict observance of its ceremonial duties. The church establishment comprises one patriarch, 2 archbishops, 15 bishops, and an immense number of inferior clergy. The Patriarch is the head of the church under the Pope. He resides at Lisbon, and his salary amounts to £109,124 sterling. He is metropolitan of the bishops of Castello-Branco, Guarda, Lamego, Leiria and Portalegre, and of all those in the colonies. The Archbishop of Braga, of the bishops of Oporto, Viseu, Coimbra, Braganza, Miranda, Aveiro, and Pinhel. The Archbishop of Evora has but three suffragans, the bishops of Elvas, Beja and Faro. The archbishops have the rank of a marquis, the bishops that of a count. The number of monasteries is 418, that of nunneries 108.

Government.] The fundamental laws of the kingdom are the

* *Entre Douero é Minho*, derives its name from being situated between the rivers Douro and Minho; *Tras-os-Montes*, is so called, from its position with respect to the preceding, as it lies beyond the mountains called Serra Maran: *Estremadura* is merely *Extrema Durii*, or the extreme province beyond the Douro: *Alentejo* comes from *atrem do rio Tejo*, beyond the Tagus: *Algarve* is a Moorish name.

Statutes of Lamego, issued by Alphonso I. in 1145. By these the monarchy is hereditary, and in case of the king's demise without male issue, his next brother succeeds; but his sons have no right to the throne till confirmed by the states. By these statutes the monarchy is not arbitrary, for the consent of the states is necessary to the imposition of new taxes, to the settlement of the succession, and other important concerns. The States were called the *Cortes*, and consisted of the clergy, the high nobility, and the commons. But as this assembly has not met since 1697, the power of the king was in fact absolute. The royal children are styled *infants* and *infantas*; but the heir apparent is entitled the *Prince of Brazil*. In 1805, there were 65 noble families, 2 dukes, 21 marquises, 29 counts, 7 viscounts, and 6 barons. Since the removal of the royal family, the government has been administered by a regency.

Population.] The population stated in the table, is the result of the last census, taken in 1780. This gave 3,558,712, as the whole number of inhabitants, amounting to almost 99 on a square mile. The most populous province, Entre Douero & Minho, had 342 on the square mile; the least populous, Alentejo, had only 32. The population must now be considerably diminished by the late removal of great numbers to Brazil, and by the battles and massacres of the French armies.

Army.] In 1803, the army consisted of the following troops :

	Men.
24 Regiments infantry	38,400
12 do. cavalry	15,520
4 do. artillery	4,944
1 Legion light hussars	1,323
1 Corps engineers	128
9 Independent companies	1,312
8 Companies royal guards	800
	<hr/>
	52,427
43 Regiments of militia	33,600
	<hr/>
	86,027

A much larger army has been assembled and organized since the late invasion, and the troops have evinced the most generous valor, and the most ardent love of country.

Navy.] The ships of war consisted in 1804, of 13 ships of the line, of from 60 to 80 guns, 15 frigates of from 24 to 48 guns, and about 30 smaller vessels, of various sizes, manned by 12,000 marines. The greater part of these vessels are now in Brazil, and a part are still in Portugal.

Revenue.] The income of the state from Portugal and the colonies is estimated at 16,000,000 dollars, and the debt is stated to be 20,000,000. Great quantities of specie were brought every year from Brazil, but the industry of the inhabitants was not sufficient to retain it. The whole of it went immediately to England, in exchange for her manufactures.

Manners and Customs.] The national character of the Portu-

guese resembles that of the Spaniards ; their bigotry, their veneration for the clergy, their propensity to revenge, their aversion to labor, their dress, and their love of pomp, music, dancing, and bull-fights, are nearly the same. The nobility also have similar prejudices, and there is the same want of that general intercourse among the various ranks, which imparts knowledge, and vigor to society. The peasantry are miserable vassals. In stature the Portuguese are inferior to the Spaniards. Their complexion is swarthy, approaching to an olive. They have generally graceful forms, regular features, and dark, brilliant, expressive eyes. The ladies are very beautiful when young. They still imitate the industry of their ancestors in spinning flax from the distaff. The inhabitants of the northern provinces are more industrious, intelligent, sincere, and hospitable ; those of the southern more polished, shrewd, and indolent. The industry of the inhabitants of Entre Minho e Douero would not suffer on a comparison with that of the more northern countries of Europe, and accordingly they are possessed of opulence, and enjoy all the comforts and luxuries of life. Those of Tras-os-Montes are a hardy race, and industrious also, in spite of their natively barren and mountainous region. In Alentejo are more wandering beggars, than in all the rest of the kingdom. The best mariners come from Algarve. The inhabitants are rough and coarse, but remarked for their wit and shrewdness.

Language.] The Portuguese language strongly resembles the Spanish ; both are derived chiefly from the Latin ; but the latter is more remote from it and harsher to the ear than the former. They have both about the same proportion of Arabic ; but the Portuguese has borrowed none of the guttural sounds of that language, which are now numerous in the Spanish, though they did not exist in the first ages of its literature. There is nothing unpleasant in the Portuguese, except a nasal sound, which however is far less disagreeable than that of the French.

Literature.] The poems of King Diniz, who lived in the latter half of the 13th century, are said to be among the earliest efforts of the Portuguese muse. It is not known whether they are extant. The earliest accessible poems are the *Cancioneiro de Recende*, a large collection, written chiefly in the reigns of Alphonso V. and his son, but comprising a few of an earlier date, and some by King Pedro, famous for his unfortunate amours with Ines de Castro. The volume consists of complimentary and satirical verses, love songs, and lamentations. The popular ballads of the Portuguese have perished. The earliest fashion of the Spanish poetry was derived from Gallicia and Portugal. The present fashion of both countries is of Italian origin. Boscan effected the change in Spain, and Sa de Miranda in Portugal, both early in the 16th century. From that time the octave stanza became the heroic, and the tri-nal-rhyme, the moral and satirical measure of both countries, and sonnets swarmed as they have done in Italy. The Ines de Castro of Ferreira was the first regular tragedy of Portugal, and the second of modern times. The Sofonisba of Trissino was the first. Ferreira introduced the epigram, the ode, and the epithalamium,

and imitated Miranda in the 'sonnet, the elegy, and the Horation epistle. The Lusiad of Camoens, settled the language of Portugal. He is their first poet, and though miserably poor, while living, he is now felt by the nation to be its boast and its pride. The translation by Mickle surpasses the original in richness of description, but not in vigor. The minor poems of Camoens are totally destitute of the licentiousness, every where apparent in the translations of Strangford. Beside the Lusiad, the Portuguese have epic poems commemorative of the founder of their state, Count Henry; of their first king Don Alphonso; of their deliverance from Castille by John I.; of the chivalrous valor of Nunalvarez Pereira; of their victories and defeats under Sebastian in Africa; of the discovery of India; of the conquests of Goa and Malacca; of the two sieges of Diu; of the Braganzan revolution; and of the marriage of Charles II and Catherine. In the age of fable also they have found Ulysses for a national hero, and in ancient history the great Viriatus. These works contain many passages of striking beauty, and many more of whimsical taste and extraordinary absurdity. Gil Vicente, their celebrated dramatist, was estimated by Lope de Vega, and Quevedo, and Erasmus learned Portuguese to read his works. Faria e Sousa wrote in Spanish, a man of great learning, and considerable genius, but of miserable taste. Antonio e Silva stands unrivalled in the latter ages of Portuguese poetry. He is celebrated for his Pindaric odes, his dithyrambics, and especially for his mock-heroic called the Hysopaida.

Amadis de Gaul is without a rival among prose romances. The Palmerin of Francisco de Moraes, is a similar work of great merit. The Portuguese have produced nothing like the modern novel. In the Portuguese sermons, the finest oratory is spoiled by the most fantastic conceits. The lives of the Saints are mere romances. There are no modern travels in the language. Their old literature is rich in this branch of knowledge. Fernam Lopez is the best chronicler of any age or nation. Gomez de Azurera is surpassed only by Lopez. These have been followed by a regular succession of historians of great merit. The Decadas de Asia by Joam de Barros, for a history, display an uncommon extent of learning. In Mathematics Pedro Nunnez distinguished himself at the beginning of the 16th century. Of late years natural history begins to be a little studied; but books of devotion and petty poems constitute the bulk of the yearly productions of the Portuguese press.

Universities.] The university of Coimbra is the most ancient, and was founded in the latter part of the 13th century. It lately contained 800 students, and had a good observatory, a fine botanical garden, a chemical laboratory, anatomical theatre, and a cabinet of natural curiosities. The university of Evora was founded in 1553, and the college of Mafra, in 1772. This last has a philosophical apparatus, and a library of 40,000 volumes. Education, however, is generally neglected, and no provision is made for the instruction of the common people.

Cities.] *Lisbon* the capital was lately the second city of Europe in commercial importance. It was the *Olisipo* of the ancients, and is said to have been built by the Phenicians. It stands on seven hills, on the northern side of the Tagus, not far from its entrance into the sea, and is sheltered on the N. W. by a ridge of hills. The harbor is one of the best in the world, uniting in a very unusual degree, the four qualities of size, depth, security, and convenience. The Tagus is here about four miles broad, and has two outlets separated by a sandbank, and the rock of Cachopos, and defended by forts. Fort St. Julian, 11 miles from Lisbon on a rock in the sea, defends the northern. Opposite to it is the *Bujo*, which is built on piles on a sandbank. The fort of Belem is 4 miles from Lisbon on the north side, and entirely commands the entrance to the city. On the south, directly opposite, is Fort Sebastian on the angle of a mountain, all along which the passage is defended by a chain of 12 forts. An old Moorish wall, with 77 towers and 36 gates, incloses the eastern part of the city. The western has been built since. The breadth of the town is inconsiderable; but it is very long from E. to W. The valleys of the hills form streets of above three miles in length, most of them narrow, ill-paved, and dirty, and many of them steep and troublesome. On one of the hills in the centre stands a citadel, which commands the whole city. There are 41 parish churches, 40 monasteries, 11 colleges for noviciats, 24 nunneries, 99 chapels, and 19 hospitals. The churches in general are elegant and rich; but that belonging to the patriarchate is of surpassing magnificence; the very ornaments and plate in it containing the treasure of several Brazil fleets. The Dominican church is very large, and the cathedral on one of the hills is splendidly ornamented. One of the hospitals, St. Joseph's, is an institution honorable to the city. In 1789, it received 11,020 patients; and the foundling hospital in the same year received 1279 children. Several of the royal palaces are magnificent, and many belonging to the nobles are stately. The Exchange and the India house are particularly deserving of notice. But the aqueduct to the north of the city is one of the noblest works of modern architecture. It was built in the years 1713—1732, and remained unhurt by the great earthquake of 1755, which destroyed the greatest and best part of the city. It rests on a long row of marble pillars, and on 75 arches is carried across the vale of Alcantara from one mountain to another. The number of houses is 44,057, and the number of inhabitants, according to Ruders, 350,000. Indolence, pride, and poverty too much characterize the inhabitants. The foreigners, who are settled here, are very numerous, and the most industrious of the inhabitants. The number of servants is disproportionately great. The police is very indifferent; the streets swarm with beggars in the day, and banditti are not unfrequent in the night. The ecclesiastics are also very numerous, and spend their time in the greatest luxury and idleness. About one sixth of the inhabitants are negroes and mulatoes. Here are two theatres, one for Italian operas, the other for Portuguese plays. There is also a large circus for bullfights. The inhabitants have a peculiar cus-

tom of throwing water on passengers in the street, at certain seasons. The commerce of the city is chiefly in the hands of foreigners. The extent of it may be estimated from the following list of the ships, which entered the port in 5 different years exclusive of coasters.

	1774	1784	1793	1797	1802
English,	348	252	234	533	383
Portuguese,	104	335	230	268	314
United States,		23	96	154	175
Swedish,	45	80	76	135	130
Danish,	41	30	58	218	96
Rest of Europe,	107	226	148	128	271
	—	—	—	—	—
	645	964	864	1586	1369

The chief exports are corks, drugs, dyeing stuffs, fruit, oil, potash, raw-silk, brandy, vinegar, &c. Manufactured goods, and all sorts of provisions are imported.

Oporto, the capital of Entre Minho è Doucro, and the second city in the kingdom, is built on the north side of the Douro, about 5 miles from its mouth. The harbor, formed by the river, is difficult to enter, but spacious and secure. A single castle is a sufficient defence. The town plot is uneven, but the streets are well paved, neat, and handsome. The number of houses is 15,138, and the number of inhabitants 70,505. It contains 10 churches, 12 convents, and 9 hospitals. Here are considerable manufactures of silks, hats, pottery, and several ropewalks, and dockyards. The trade of the city is extensive. More than 500 ships annually enter. The imports in 1790 amounted to £600,000 sterling, and the exports to £800,000, of which about 80,000 pipes of wine constituted the chief article. The others were Brazilian goods, vinegar, and brandy.

Elvas, the capital of Alentejo, is a fortified city, 14 miles W. by N. of Badajos. It has a castle on an eminence, and is commanded by Fort La Lippe. The city contains 3 parish churches, and a cathedral, 2 hospitals, 7 convents, 3,000 houses, and 12,500 inhabitants. The streets are narrow and dirty, and the houses badly built. Here is a remarkable aqueduct, supported by 3 arches, one over the other, 4 miles in length, which conducts the water into a very large reservoir. At some distance from the town the country is bleak and barren.

Braga, in Entre Minho è Douro, the *Augusta Braccara* of the Romans, is seated in a pleasant plain, cultivated and shaded by trees, near the Cavado. Several of the streets are wide and open, but the houses are generally small. It contains 6 parishes, 8 monasteries, and one hospital. The number of houses is 3087; of inhabitants 12,362. Here is an extensive hat manufactory, which supplies the greater part of the kingdom; also manufactories of linen and knives. Every part of the town exhibits marks of industry. The old gothic cathedral and the remains of a Roman amphitheatre, and aqueduct, are objects of curiosity to the antiquary.

St. Ubes, or Setuval, the ancient *Cedobriga*, is situated on a fine bay, into which the river Sadaon discharges itself. The harbor is not large, but secure, and deep enough for vessels of any burden. It is defended by the strong fort of St. Jago. The town is fortified by eleven whole, and two demi-bastions, and a citadel. It contains 5 parishes, 9 monasteries, 2 nunneries, 1 almshouse, 1 hospital, 2090 dwelling houses, and 12,000 inhabitants. About 500 sea vessels, and as many coasters, enter here annually. Here are very extensive salt-ponds, and a considerable trade is carried on in salt, wine, and oil. The environs are fertile and well cultivated.

Evovra, in Alentejo, the ancient *Ebora*, said to have been built by the Phenicians, and walled about by Sertorius, stands in a large plain surrounded on all sides by mountains. It contains 5 churches, 3162 houses, and 14,200 inhabitants. The aqueduct built by Sertorius, still in excellent preservation, is a beautiful monument of Roman architecture.

Coimbra, in Beira, the ancient *Conimbrica*, was built about 300 years before Christ. It stands in an elevated situation, on both sides of the Mondego, and is a large and handsome city. Its Roman walls are still standing, having several towers, and 6 gates. The town contains 5 churches, 7 convents, an almshouse, and an hospital, 3063 houses, and 11,871 inhabitants. Here is an extensive manufactory of earthen, and some linen and woollen manufactures. A strong stone bridge connects the two parts of the town.

Edifices.] In the town of Mafra is the royal palace, built by John V. in the years 1717-1731, which, for its uncommon magnificence, is called the Portuguese Escurial. The whole composes one immense building with a vaulted covering, 866 rooms lighted by 5,200 windows. The apartments of the court are large and sumptuous. The church is built entirely of marble, and has in its towers 114 chiming bells. The convent furnishes habitations, and a large income to 200 capuchins, besides splendid apartments for the patriarch, and 24 canons. The college, also a part of the palace, has a library of 40,000 volumes, and a fine mathematical apparatus. The gardens and grounds are extensive, and kept in excellent order, and are richly stored with exotics. The building looks towards the sea, and serves as a landmark for mariners. Portugal, like Spain, exhibits but few splendid villas.

Manufactures.] The hat manufactory at Braga is the most important establishment in Portugal. The same article is manufactured at Oporto and Lisbon. Silk is extensively fabricated at Oporto, and 200 looms are employed in weaving the velvets of Braganza. Woollens are made at Elvas, and in great quantities at Covilhao, for the army and the court. At Azetao is a large establishment for fine cottons. At Coimbra and Estremos, earthen ware is extensively manufactured, and less so at Oporto. Linen also is made at Braga, and Coimbra, thread at Braganza, glass of an excellent quality at Marinha, salt in abundance at St. Ubes, and great quantities of a peculiarly white salt at Alcazar-do-Sol. At Braga there is also a manufactory of knives.

Commerce.] The trade of Portugal is principally carried on

with England and Brazil. The exports to England, in 1799, were £1,047,054 sterling, and in 1800, £916,848 ; the imports in 1799, £1,073,411, and in 1800, £1,011,893. In 1806, 468 vessels cleared out for England, and 332 entered from that country. England transmits woollens, hardwares, cottons, fine linens, salted and dried fish, to the amount of £200,000 sterling ; and receives in return, bullion, coin, precious stones, wines, brandy, and fruits. Portugal sends to Brazil woollens, linens, stuffs, gold and silver lace, glass, dried fish, hams, and sausages. The goods returned, are gold, silver, pearls, precious stones, cotton, dyes, indigo, rice, coffee, maize, wheat, ginger, sugar, molasses, ornamental wood, and drugs. The other exports from Portugal, are salt, cork, sumach, sugar, oil and vinegar, and the various articles received from Brazil. The imports from the United States, in 1806, amounted to about 1,925,000 dollars. The exports to France, in 1801, were about 1,937,000 dollars ; the imports about 734,000.

Of port wine about 48,000 pipes are annually exported, valued at \$4,200,000 ; of Lisbon 10,000 pipes, valued at 500,000 ; of wool 1,000,000 pounds ; of oil 1200 pipes ; of salt 2,400,000 bushels ; and of fruits 95 cargoes.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, MOUNTAINS, ZOOLOGY, BOTANY, MINERALOGY.

Climate.] THE breezes from the ocean temper the cold of winter and the heat of summer so much as to render those seasons far more similar here, than in the other countries of Europe. The winters of Portugal are more characterized by their rains, than their cold. Both heat and cold in Spain are more excessive than in Portugal. The spring is uncommonly delightful. Lisbon has been the great resort of consumptive persons from Great Britain, and the climate of the whole country is unusually salubrious. The number of clear days annually in Lisbon, is about 200, and of settled rain about 80. The medial heat is about 60 of Fahrenheit.

Face of the country.] Portugal is a far more level country than Spain. None of the provinces, except Tras-os-Montes, can properly be called mountainous. Alentejo is generally level. The others are generally diversified by hill and dale.

Soil and Agriculture.] The soil, like that of Spain, is generally light and shallow, but capable of producing abundantly every thing requisite for the sustenance and comfort of man. Entre Douro e Minho, Estremadura and Algarve are peculiarly fertile. The vallies of Tras-os-Montes are rich and delightful, but the province on the whole is wild and barren. Beira and most of Alentejo, with the proper cultivation, may be made to produce abundant crops.

The agriculture of Portugal, generally is much neglected. The northwestern province, however, is in a high state of cultivation, as are the vallies of the northeastern. The chief productions are corn, maize, wine, oil, honey, flax, wool, silk, and fruits.

Rivers.] The Minho, the Douro, the Tagus, and the Guadiana have already been described.

The Lima, anciently the *Lethe*, rises in Galicia, runs a S. W. course, and forms the harbor of Viana. Its current is gentle, and small vessels navigate it about 20 miles.

The Cavado runs a parallel course, and is boatable about 5 miles.

The Mondego rises in the Serra d'Estrella, near Guarda, runs a W. S. W. course of about 110 miles, of which about 60 are navigable for boats.

The Sadaon is a small stream forming the harbor of St. Ubes.

The Soro is the chief tributary of the Tagus in Portugal, and the turbulent Ardala, of the Guadiana.

Mountains.] The Serra Monchique, the northern boundary of Algarve, is separated by the Guadiana from the Sierra Morena. Its course in Portugal is from E. to W. about 80 miles. A part of this chain is called the Serra de Caldeirao. In Alentejo is a small chain, about 30 miles long and 6 broad, which terminates a little N. W. of Evora. It is merely a continuation of the mountains of Toledo.

The Serra d'Estrella is the longest chain in Portugal. It may be considered as commencing at the Rock of Lisbon, and running N. E. through Estremadura and Beira, till it joins that part of the mountains of Guadarama, called Sierra de Gata. The highest summit of this range, the *Mons Hermenius* of the ancients, is called Estrella, and gives its name to the whole chain. At its foot stands Villa St. Romao, a village of Beira. On the top the traveller finds verdant pastures, and rivulets of clear water. But that which most arrests his attention is a lake, surrounded by high rocks. The water is clear and tepid, and has a tremulous motion in the middle, and now and then small vesicles are seen to rise aloft from its surface. From the strong current in it at one particular place, it is believed that there is an aperture, through which it feeds another lake farther down the mountain.

The summits of Tras-os-Montes appear to be an extensive clump of hills, pursuing no settled course, and connected with no regular chain.

The Rock of Lisbon, or the Roca-di-Cintra, consists of large rocks of flint, some of ten feet in diameter, lying on each other without order or connection. It is rich in ore, and produces many remarkable plants. Near the summit are seen the ruins of an old Moorish town and fortress, with a reservoir, under an arch, of very fine water. On the top, which is 3000 feet above the ocean, is a hermitage and a convent.

Zoology.] The horses of Portugal are much inferior to those of Spain, and great numbers of the latter are annually imported. Asses and mules are numerous. Horned cattle are too much neglected. Less attention is paid to the breeding of sheep than in Spain; but the wool is in all respects equal. Hogs abound. They live in the woods, on acorns, and the hams are excellent.

Botany.] The indigenous plants of Portugal are the same as those of Spain; but a number of exotics have strayed from the

gardens and grown wild, particularly around the large seaports. Among these are the American aloe, the Indian fig, the magnolia grandiflora, the date palm, the Lusitanian cypress, originally from Goa, the tea tree, the fragrant olive, the Cape jasmine, the ice plant, and the myrica faya. Wheat, barley, rye, oats, maize, rice, Guinea corn, millet, sweet potatoe, plantains, pulse, lupins, Monk's beans, Jerusalem artichoke, the tomato, gourds, cucumbers, and melons, are among the esculent plants of the field and garden. The fruit trees have been mentioned.

Mineralogy.] The mineralogy of Portugal has been much neglected. Small veins of gold have been observed in the mountains of Goes and Estrella ; and it is still found in the sand of some streams, as in ancient times the Tajo was celebrated for this metal. Under the dominion of the Spaniards, a mine of silver was worked, not far from Braganza, so late as the year 1628. Tin was also found in various parts of the northern provinces. There are lead mines at Mursa, Lamego, and Cogo ; and the galena ores are very productive of silver ; copper is found near Elvas, and in other districts. The iron mines are neglected, from a deficiency of fuel ; though coal is found in different parts of the kingdom, and that of Buarcos supplies the royal foundery at Lisbon. Emery is found near the Douro ; and many beautiful marbles abound in this kingdom. Fullers earth occurs near Guimeraes. Portugal also boasts of antimony, manganese, bismuth, and arsenic ; and near Castello-Branco are mines of quicksilver. Rubies have been discovered in Algarve ; jacinths in the rivers Cavado and Bellas ; beryl or aquamarine in the mountain of Estrella. In short, Portugal abounds with minerals of most descriptions ; and nothing is wanting but fuel and industry.



ITALY IN GENERAL.

CHAPTER I.

BOUNDARIES, EXTENT, DIVISIONS, NAMES, ORIGINAL POPULATION, HISTORY, RELIGION, GOVERNMENTS, LANGUAGE, POPULATION, CLIMATE, FACE OF THE COUNTRY, SOIL, AGRICULTURE, RIVERS, LAKES, MOUNTAINS, BOTANY, ZOOLOGY, MINERALOGY.

Boundaries.] THE Alps divide Italy from France, Switzerland, and Germany on the North ; the Adriatic Sea bounds it on the Northeast ; on the South and West it is washed by the Mediterranean.

Extent.] Italy lies between 37 and 46° 30', N. lat. and 6° 10' and 18° 35', E. lon. Its greatest length is 740 miles, and its greatest breadth is 400. The contents in square miles, exclusive of the islands, is 95,585, viz. 31,505 in the kingdom of Naples ; 32,920

in all the annexations to France ;* and 31,160 in that part of the kingdom of Italy which is in Italy.

Divisions.] The ancients divided Italy into *Gallia Cisalpina* on the north, *Italia Propria* in the middle, and *Magna Graecia* on the south. These divisions were recognized till the time of Augustus, who subdivided Italy into eleven regions. The whole of the Italian dominions, comprehending Corsica, Sardinia, the Venetian and other islands, before the late revolutions, were divided in the manner exhibited in the following TABLE.

	Countries Names.	Square Miles.	Length.	Breadth.	Chief Cities.
To the king of Sardinia.	Piedmont	6,619	140	98	Turin
	Savoy	3,572	87	60	Chambery
	Montserrat	446	40	22	Cassal
	Alessandrine	204	27	20	Alexandria
	Oneglia	132	24	7	Oneglia
To the king of Naples.	Sardinia Island	6,600	135	57	Cagliari
	Naples	22,000	275	200	Naples
To the Em- peror.	Sicily Island	9,400	180	92	Palermo
	Milan	5,431	155	70	Milan
	Mantua	700	47	27	Mantua
	Mirandola	120	19	10	Mirandola
					N. lat. 41° 54'
	Pope's dominions	14,348	235	143	Rome
					E. lon. 12° 45'
To their re- spective princes.	Tuscany	6,640	115	94	Florence
	Massa	82	16	11	Massa
	Parma	1,225	48	37	Parma
	Modena	1,560	65	39	Modena
	Piombino	100	22	18	Piombino
	Monaco	24	12	4	Monaco
Republics.	Lucca	280	28	15	Lucca
	St. Marino	8			St. Marino
To England	Genoa	2,400	160	25	Genoa
	Corsica Island	2,520	90	38	Bastia
To the re- public of Venice.	Venice	8,434	175	95	Venice
	Istria P.	1,245	56	32	Capo d'Istria
	Dalmatia P.	1,400	135	20	Zara
	Isles of Dalmatia	1,364			
	Cephalonia	428	40	18	Cephalonia
Islands in the Vene- tian do- minions.	Corfu, or Corcyra	194	31	10	Corfu
	Zant, or Zancynthus	120	23	12	Zant
	St. Maura	56	12	7	St. Maura
	Little Cephalonia, Ithaca olim	14	7	3	
	Total,	75,056			

The present divisions of Italy will be seen in the sequel.

* The reason why the number of square miles and population annexed to France from Italy, as here given, differs from that given in the account of France is, that the

Names.] This celebrated country was known in more ancient times by the names *Saturnia*, *Enotria*, *Ausonia*, and *Hesperia*. Italy, its present name, was probably the *Aitolia* of the Greeks, transferred to the other side of the Adriatic, though some authors derive it from *Italus*, a king of Arcadia.

Original Population.] Ancient writers are extremely confused in their account of the first inhabitants of Italy; and it is difficult to come to any satisfactory conclusion with regard to their names, numbers, and origin. The authors of the Universal History consider the *Umbri* as the *aborigines* of northern and central Italy. The Gauls drove the *Umbri* southward, and, in the first ages of Rome, were possessed of a great part of *Gallia Cisalpina*. The *Tyrrheni*, or Etruscans from Lydia, in Asia Minor, possessed themselves very early of the central parts of Italy, and appear to have become incorporated with the *Umbri*. The whole of *Italia Propria* was denominated *Tyrrhenia* by the Greeks. The southern parts of Italy were peopled by numerous small colonies of Greeks, who settled there in different periods, and gave the country the name of *Magna Graecia*. It is doubtful whether Eneas ever settled in Latium with a colony of Trojans; but, be this as it may, the Romans were chiefly or wholly descended from the Etruscans. The founders of their city were a company of freebooters, headed by Romulus and Remus, the first of whom gave a name to the city and nation.

History.] Nothing can be said here of the modern petty states; we shall merely notice those great events, which have in a measure affected the whole country.

1. The earliest known condition of Italy when the northern and central parts were in the possession of the *Umbrians*; and the southern, of various colonies of *Pelasgi*.

2. The settlement of the Etruscans, a colony from Lydia, in the middle of Italy, probably before the Trojan war. Their empire became at length very extensive. The Gauls also got possession of all the continental part of Italy, driving before them the *Umbrians* and *Etruscans*.

3. The building of Rome by Romulus, the grandson of Numitor, about 750 years before Christ, and the establishment of the monarchy, which lasted 243 years.

4. The burning of the city by the Gauls B. C. 384. Before this event the Sabines, Veientes, and Fidenates had been vanquished and brought into subjection.

annexation of the States of the Church, and various other districts, was not known to the Author when the description of France was printed.

Since the above was written, a decree of the French emperor of the 5th of August, 1811, has been received, which ordains, that the " river Enza, from its mouth to its source, shall be the boundary between France and the French kingdom of Italy. From the source of the Enza the boundary shall proceed along the summit of the Apennines, to the present frontier of the Garsagnana, and of ancient Tuscany. The boundary between the kingdom of Italy and the Illyrian provinces, shall follow the course of the Isonzo, from its mouth to its source; thence it shall skirt the territory of Wessenfels and Tarvis, which shall belong to the kingdom of Italy; and thence shall proceed by the summit of the Julian Alps, east and west, to the frontiers of the Tyrol."

5. The commencement of the first Punic war, in the year B.C. 263, which lasted 24 years, and was the first which the Romans ever waged out of Italy. At this time the whole of central and southern Italy were possessed by the Romans, who had subdued the Etruscans, the Umbrians, Latins, Equi, Volsci, and Samnites, and all the smaller tribes in this part of Italy.

6. The second Punic war, begun in 218 B.C. during which Hannibal marched into Italy over the Alps, subdued every thing except the city ; but was at length defeated, and obliged to leave Italy in order to defend Carthage. There he was vanquished, and Carthage reduced.

7. The termination of the republic, and the assumption of the imperial dignity by Julius Cæsar, in the year 44 B.C.

8. The various invasions of Italy by Alaric, king of the Goths, in the beginning of the 5th century. In 404, Honorius transferred the seat of the empire from Milan to Ravenna. The invasion of the Huns under Attila was in 452, and that of the African Vandals under Genseric, in 455. In 488, Theodoric, king of the Ostrogoths, planted them in the country, and established a kingdom there, the capital of which was Verona. It lasted 64 years, and was finally destroyed by Narses, general of Justinian.

9. Longinus, under Justin, emperor of the east, in the year 568, settled a governor in every city of Italy, under the title of Duke, and took himself that of exarch, which form continued 571 years under the name of exarchate. The same year, under Alboin, the Lombards entered Italy, from Germany directly, but originally from Scandinavia. They conquered numerous cities in the north, and made Pavia their capital.

10. Pepin, king of France, A.D. 756, invested the Pope with the exarchate of Ravenna, and various other territories which had been seized by the king of the Lombards, and thus rendered him a temporal prince, who governed the exarchate by an archbishop.

11. Charlemagne, in 770, reduced the kingdom of the Lombards, and sent their king, Desiderius, and his family into France. This kingdom, at the time of its overthrow, comprised all of northern and central Italy, except the possessions of the Pope, and the greater part of the present kingdom of Naples ; the remainder of which was still held by the emperors of the east. Charles himself was crowned king of Lombardy. His successors retained that title till the year 890.

12. The distracted state of Italy, after the termination of the Carlovingian dynasty. The country became the scene of numberless civil wars, was repeatedly and terribly invaded by the Hungarians and Saracens, and at length, in 961, fell to the possession of Otho I. emperor of Germany. Apulia and Calabria were still claimed by the Greeks, but all the rest was subject to, or held of, the emperor, as king of Italy. The imperial government continued with various oppositions and interruptions, but on the whole unshaken till the time of Frederic II. who died in 1250.

13. After the loss of Italy to Germany, various unsuccessful attempts were made by the emperor, and the kings of France and

Spain to reduce it under their dominion. For more than two centuries also it continued the scene of numberless and obstinate wars between the various petty states. At length, in 1809, the French came into possession of the whole country. All the petty states are now abolished. Naples has had one of the Bonaparte family placed at its head. One third of the country is annexed to France, and the north-east formed into the kingdom of Italy, of which the French emperor is sovereign.

Religion.] In all parts of Italy the Roman Catholic religion is established, and in many parts no other is permitted.

Governments.] Before the late changes in Europe, Italy contained almost every species of government. Naples and the country of the king of Sardinia were absolute monarchies; Venice, Genoa, and Lucca were aristocratical republics, and St. Marino a democratical one; that of the State of the Church was a non-descript; the petty princes had, each, different degrees of independence and power; and the three duchies of Milan, Mantua, and Mirandola, were colonies of Austria.

Language.] The Italian is spoken throughout the whole of Italy; but with various degrees of purity. On the borders of France and Germany it is corrupted by the languages of those countries. The purest Italian is spoken in Tuscany, and at Rome. In the sea-ports the Lingua Franca is generally understood.

Population.] The whole population of Italy, comprising all the territories described under this head, according to Hassel's estimate, which is deemed the most correct, is 16,117,000.

Climate.] The climate of the north of Italy is temperate and healthy; and near the foot of the Alps the winters are often severely cold. That of the peninsula is extremely warm. In the central parts, particularly in Tuscany, the Ferrarese, and the Campagna di Roma, it is rendered very unhealthy by the number of stagnant marshes. The heat of Naples would often be intolerable, if it were not for the regular recurrence of sea-breezes.

Face of the Country.] Italy presents every variety of surface. The French, Swiss, and German frontiers are wholly mountainous, and the chain of the Appenines runs along the Gulf of Genoa, and through the whole peninsula. Between the Alps and the western Appenines are many extensive and fertile plains and valleys, watered by the Po and its numerous branches. In the peninsula, also, on both sides of the mountains, the country is sometimes a succession of hills and dales, and at others the vallies widen into plains of singular richness and beauty. The warmth of the climate, the richness of the soil, the frequency of the rains, and the number of brooks and rivers, give a beauty to the Italian landscape, which is not known in the rest of Europe.

Soil and Agriculture.] Every part of this country possesses a fertile soil, capable, with moderate cultivation, of bearing in abundance all kinds of grain, vegetables, and fruits. The agriculture of the north is proverbially excellent; Lombardy having been styled for many centuries *the garden of Europe*. The middle and southern regions are generally also in a high state of cultivation.

Rivers.] The Po, called *Padus* and *Eridanus*, by the ancients, is the largest river of Italy. It rises in Mount Viso, the highest of the Maritime Alps, on the western frontiers of Piedmont, 7 miles N. of Castel Delfino, and 18 W. of Saluzzo. Its course is N. E. to Chivasso, and thence almost directly E. but on the whole a little S. to the Adriatic, which it enters by several mouths, under the parallel of 45. Probably no river in the world of the same size, has so large or so numerous tributaries. On the left bank it receives the Doria, at Turin, the Grand Doria below Chivasso, the waters of Lake Maggiore through the Tessino, above Pavia; the Adda above Cremona, and some distance below, the Oglio. On the south it is joined by the Tanaro below Alessandria, the Trebia at Placenza, the Taro, which runs by Parma, the Lecchia and the Panaro. The whole length of the river is about 350 miles. Notwithstanding the Po flows chiefly through plains, yet its course is generally rapid, and, when swelled by the mountain snows, it becomes a torrent inundating the neighboring country.

The Tiber, *Tiberis*, received its name from *Tiberinus*, a king of Alba, who was drowned in it. It rises among the Appennines, near Borgo di St. Sepolcro, and pursuing a southerly course, passes through Rome, and falls into that part of the Mediterranean which is called the *Tuscan sea*, below Ostia. Its length is about 180 miles.

The Adige, the *Athesis* of the Romans, and *Etsch* of the Germans, rises among the Rhaetian Alps, near Sterzing, in the county of Tyrol, runs southward by Trent to Verona, and thence turns eastward to the Adriatic, into which it falls about 12 miles N. of the Po, and 24 S. of Venice, after a course of 210 miles. The Piave and Tagliamento fall into the N. W. side of the same sea. The Primaro runs about 100 miles, and empties about 12 miles N. of Ravenna.

The Arno, *Arnus*, rises among the Appennines, in Tuscany, passes by Florence, and falls into the sea 12 miles N. of Leghorn, and below Pisa, to which it is navigable in small vessels. It receives in its course the Siera, the Pesa, and the Elsa. Its length is about 100 miles. The Voltorno falls into the Gulf of Gaeta. The famous Rubicon, is a small stream, which forms the southern boundary between Italy and the ancient Cisalpine Gaul.

Lakes.] The Lago Maggiore is about 27 miles in length, by 3 of medial breadth, receiving the waters of lake Lugano on the east. This lake contains the Boromean isles, celebrated by many travellers. Still farther to the east is the lake of Como, which is joined by that of Lecco: the lake of Como is about 32 miles in length, but the medial breadth not above two and a half. Yet farther to the east is the small lake of Iseo, which is followed by the Lago di Garda, an expanse of about 30 miles in length by 8 in breadth.

In the central part of Italy the largest lakes are those of Perugia and Bolsena, that of Albano, shaded by trees and rocks, and that of Nemi in the same vicinity, about 17 miles S. E. from Rome.

In the Neapolitan part is the lake of Celano in the north; and that of Varano, near mount Gargano.

Mountains.] The Alps have already been minutely described.

The Appennines branch from the Maritime Alps near Ormea, and run N. E. at no great distance from the coast, and parallel with it, to the meridian of Genoa. Thence their course is E. for about 50 miles, and thence S. E. through the whole peninsula, generally approaching nearer to the Adriatic, than the Tuscan sea. In Naples the chain divides, a part of it running eastward towards Otranto, the other southward to the extremity of Italy. Mount St. Angelo, the ancient *Garganus*, is a spur from the Appennines, running N. N. E. to Cape de La Teste. These mountains are every where covered with wood. They do not form one uninterrupted level, but consist of distinct hills, the middle regions of which meet each other, while you have an open prospect of the horizon between their summits.

Mount Vesuvius, a solitary mountain 6 miles E. from Naples, has 2 peaks. The north peak resembles an inverted cone, striking the eye with the view of an accumulated mass of stones, sand, and cinders, and is properly the volcano. It is 3600 feet above the sea. The south peak, called the Somma, does not exceed 5300. The south and west sides of the mountain are entirely covered with cinders and ashes, the north-east is well cultivated and fertile, producing great plenty of vines. Vesuvius has been liable to frequent eruptions. The first on record is that of the year 79, when Pompeii and Herculaneum were completely buried by the lava. In 1538, a mountain, 3 miles in circumference, and a quarter of a mile high, was thrown up in the course of one night. The eruption in August, 1769, so well described by Sir William Hamilton, was the most remarkable which the mountain has experienced. The circumference of Vesuvius is 30 miles. The circumference of the crater is half a mile.

Botany.] The forest trees in the north, among the Alps, are the pine, the larch, the fir, yew, mountain ash, birch, juniper, sa-vine, stone pine, and alder; and lower down, the oak, elm, linder, hasle, service-tree, lime, ash, horn-beam, apple, and walnut; and farther south, the prickly oak, chesnut, poplar, cork tree, storax, bread-tree, pyracanthus, carol-tree, tree of Judas, cypress, manna-tree, and ilex. The fruit trees are the apple, pear, peach, plum, cherry, apricot, nectarine, pomegranate, orange, lemon, fig, date, palm, pistachio, almond, olive, and the vine. Of these most grow wild in the woods, and of the smaller plants the number is too great to admit of an enumeration. Stolberg gives a minute account of them.

Zoology.] The cattle of Italy are generally large and excellent. Those in the north are of a clear brown, or of a pale rose color; those in the middle and south, are of a light grey. The buffalo is common. It was brought from Asia. Many of them are tame. The milk is thinner than that of the cow, but sweet and healthy. The Italian horses are little esteemed; but those of Naples, though small, are beautiful and full of fire. Asses and mules are

extensively used in travelling. The goats of Savoy are numerous and fine, and the sheep of Italy generally. The hogs are large and black. Wild-boars, wolves, and foxes are still found in the forests, as well as plenty of game. Birds do not abound in the woods, as they do in many other countries.

Mineralogy.] The mountains contain marble, alabaster, jasper, porphyry, iron, lead, alum, sulphur, and some gold and silver.

Arrangement.] We propose to consider Italy according to its present divisions. The western part which is annexed to France claims our first attention ; then the kingdom of Italy, in the east, then that of Naples, in the south, with dependant islands, and lastly the surrounding islands of Sicily, Sardinia, Malta, and the Ionian Republic.

CHAPTER II.

TERRITORY OF FRANCE IN ITALY.

SITUATION, EXTENT, DIVISIONS, POPULATION, ARMY, CITIES.

Situation.] THE possessions of France in Italy have the Alps on the west. North of the Po they reach to the former west frontier of Piedmont, and south of that river to the east frontier of Parma. The line runs thence nearly south to the territory of Massa, and thence nearly E. to the Adriatic, passing a little south of St. Marino. Their southern boundary is the kingdom of Naples, which has the same limits as before the French revolution.

Extent.] The length of this territory, from the river Secco, the S. W. frontier, to Geneva Lake, is 400 miles. The breadth, from the opposite boundaries of Piedmont and Parma, is 170 miles ; at Massa it is not 20.

Divisions.] We have already mentioned the former divisions of this territory. It is now divided into departments. Those of Piedmont and Savoy have already been given in the geography of France. If the other countries have been thus divided, the names of the divisions have not reached us.

Population.] We must be indebted for our account of the population of this territory, as of most other countries of Europe, to the excellent statistical tables of Hassel, published at Göttingen, in 1809. He gives the population of the various districts, which now compose the French possessions in Italy, under the names they then bore, as follows. In the departments made out of Savoy and Piedmont, in 1808, 2,857,916 ; in the duchies of Parma and Piacenza, 240,000 ; in Lucca and Piombino, 172,000 ; in the kingdom of Etruria, 1,100,000 ; Ecclesiastical State, 668,000, or about 5,040,000 in the whole.

Army.] This part of Italy being thus brought under the immediate dominion of the French Emperor, and portioned out into departments, will, like France, be liable to the conscription. The

same laws also will regulate the fiscal concerns of both countries.

Cities.] Rome, once the mistress of the world, and the mother of so many kings and heroes, is now the chief town of a French department. It was built by Romulus, B. C. 753, burnt by the Gauls in 384, B. C. by Nero, A. D. 64, again by accident in 191, taken by Alaric, 410, and since that time by numerous invaders. It stands on a bend of the Tiber, 15 miles from its mouth. Over the river there are 6 bridges. Almost the whole of the city is on the east side of the river; a single ward is on the other side, and from that circumstance called *Transtevere*. The city is 13 miles in circumference, and is surrounded by a wall, only a small part of which flanks upon the river. The walls have 20 gates. Some of the seven hills upon which it was built, appear now but gentle swellings, the intervals having been gradually raised by the rubbish of ruined houses. Several of them are entirely laid out in gardens and vineyards; and it is said that from half to two thirds of the ground within the walls is thus laid out, or covered with rubbish. The streets are large and handsome, but not kept in good repair. The squares also are numerous and beautiful. The number of parishes is 96, of churches 300, of towers as many, of palaces 2200, of monasteries 64, of nunneries 40, and of hospitals 30. By a census taken in 1709, the population was 138,568. By that of 1797, the number of houses was 35,900, and of inhabitants 163,034. The churches are generally elegant; but the most splendid are those of St. John de Lateran, St. Peter in the Vatican, St. Paul, St. Mary, St. Laurence, the Holy Cross, and St. Sebastian. The church of St. Peter is the most superb edifice of modern times. A magnificent portico advances on each side from the front, by which means a large square is formed, open on one side. At the end of each porico a colonade commences, of four columns deep, and above 300 in the whole, forming three separate walks that lead to the advanced portico, and from that to the church. The colonades are crowned with balustrades, ornamented by numerous statues; and running in an oval direction, embrace a much larger space than the square. Their two outer extremities are just the width of the square apart. In the middle of this immense area stands an Egyptian obelisk, of granite, and to the right and left of this two very beautiful fountains are constantly playing. The length of the front is 730 feet, and the breadth of the church 520, the height to the top of the cross, which crowns the cupola, 450. The length of each portico 216 feet, and the breadth 40. The streets and squares are every where ornamented with fountains and statues.

Milan, anciently *Mediolanum*, stands in a fruitful and pleasant plain, near the Adda. It is ten miles in circumference, and half of the inclosed ground is occupied by gardens. It is surrounded by a wall, with 22 gates, and a rampart. The citadel is a large hexagon, and is one of the strongest fortresses in Italy. The streets are broad and neat, the squares spacious and handsome, and the houses lofty. There are here 250 churches, 40 monasteries, 50 nunneries, numerous hospitals and religious fraternities,

and in 1803, 128,862 inhabitants. The cathedral is a vast structure, 500 feet long and 300 broad, built wholly of white marble. This city was built by the Gauls, 358 years B. C. A short canal connects it with the Adda, and a much longer one with the Tessino. About 2 miles from the city is an artificial echo, which will repeat the report of a pistol above 60 times. The environs are embellished with beautiful villas, gardens, and orchards.

Genoa stands at the head of the Gulf of Genoa, and is about 10 miles in circuit. A double wall defends it on the land side, and several bastions are erected along the shore, on rocks, which rise above the water. About 500 cannon are mounted on all the works. The streets are well paved and neat, but too narrow to admit of coaches. Two, called the *Strada Nuova*, and *Strada Balbi*, are filled with magnificent palaces, fronted with marble. The houses are handsome and very lofty. The number of inhabitants in 1789, was 80,156. The harbor is large, but not safe. The light-house is on a high rock, at the west side, and is one of the loftiest known.

Florence, formerly *Florentia*, in Tuscany, was built by Sylla, and rebuilt by Charlemagne. It stands at the foot of the Apennines, on both sides of the Arno. Four stone bridges connect the two parts of the city. The walls are 6 miles in circuit. The streets are remarkably clean, the houses handsome, and some of the churches magnificent. This city is decorated with 150 churches, 89 convents, 18 halls for merchants, 72 courts of justice, 22 hospitals, 6 obelisks, 2 pyramids, 7 fountains, 17 squares, and 160 public statues. The cathedral is a noble edifice, with an outside of polished marble. Near it stands a tower 288 feet high. In the environs are near 2,000 villas. The nobles of Florence are engaged in merchandise. The principal trade is in wine, oil, fruits, raw silk, and gold and silver stuffs.

Turin, in Piedmont, anciently *Augusta Taurinorum*, stands 7 miles from the foot of the Cottian Alps, on a plain, at the confluence of the Po and the Doria. The environs are beautiful. The walls are strong, and are 6 miles in circuit. The four gates are highly ornamental. The fortifications are regular, and the citadel is one of the strongest in Europe. The streets are wide, straight, and clean, having plenty of water running through them. The houses are handsome, and are chiefly of brick, stuccoed. There are 130 churches and chapels in the town, and 17 in the suburbs. The population in 1802 was 73,716.

Leghorn, in Tuscany, comparatively a modern city, stands on the Tuscan sea, 12 miles S. of the Arno. It is walled, and has two forts towards the sea, and a citadel towards the land side. The inner harbor will admit but a few vessels, the outer is formed by a mole, 600 paces long, but is too shallow for large ships. Leghorn is not distinguished by its edifices, but is wholly singular among the cities of Italy for the industry and commercial enterprise of its inhabitants. The streets are perfectly straight, and the houses handsome. The town is intersected by several canals, which have drained the noxious marshes in the neighborhood. Fresh water is procured from Pisa. The number of inhabitants is 58,000. The trade

consists in silks, coffee, cotton, aniseed, alum, essences, wine, oil, fine wax, and straw hats. The coffee-houses are the finest in Europe.

Parma is unequally divided by the river Parma, which falls into the Po, 12 miles below the city. It is 4 miles in circuit, and defended by a citadel and regular fortifications. The streets are broad and straight, the houses are well built and regular. Here are 35 churches. The theatre is famed throughout Europe. It will receive 12,000 auditors, and the lowest sound may be heard distinctly by all. The cathedral also is large and beautiful, and surrounded with several rows of pillars. Its dome was painted by Correggio, who passed most of his life at Parma. Inhabitants 35,000.

Alessandria is situated in a marshy country, on the Tenaro. The citadel is strong; but the fortifications are mean. Inhabitants, in 1802, 32,225.

Lucca is delightfully situated in a beautiful plain, adorned with villas, villages, and vineyards. It is regularly fortified with eleven bastions, and is 3 miles in circuit. The houses are handsome, the streets broad and well paved, but irregular. Inhabitants 22,000.

Pisa, in Tuscany, stands on both sides of the Arno, 4 miles from its mouth. Three bridges are thrown over the river. The streets are regular, broad, and well paved, and the houses well built. The circumference of the city is as great as when the population was 150,000. Many of the streets are now overgrown with grass, and many of the houses are uninhabited. Inhabitants 22,000.

Asti, in Piedmont, the capital of the department Marengo, stands near the Tenaro, in the midst of pleasant and fertile environs. It contains 31 churches and convents, and is generally well built. Population 21,225.

Mondori, in Piedmont, is built on the top of a small mountain, near the Appennines, and in 1809, had 21,577 inhabitants.

CHAPTER III.

KINGDOM OF ITALY.

SITUATION, DIVISIONS, HISTORY, GOVERNMENT, POPULATION, ARMY AND NAVY, REVENUE, CITIES, ISLANDS.

Situation.] THE western and southern frontiers have already been mentioned; on the N. it has Bavaria; on the E. it has the Illyrian Provinces, from which it is separated by the Isonzo river, from its mouth to its source. The duchies of Milan, Mantua, Mirandola, and Modena, the possessions of Venice, the republic of St. Marino, the Ferrarese, Bolognese, and Romagna, lately a part of the ecclesiastical state, and the peninsula of Istria, and

territory of Dalmatia, as far south as lat. 42°, on the coast of Turkey, are the districts out of which this kingdom is composed.

Divisions.] I. West Lombardy, 10,275 square miles, 2,519,194 inhabitants.

Departments.	Population.
1, Agogna	329,245
2, Adda	81,615
3, Olona	515,718
4, Lario	312,978
5, Upper Po	326,483
6, Serio	288,333
7, Mella	297,840
8, Mincio	217,463
9, Adige	149,519

II. South Lombardy, 11,485 square miles, 1,922,554 inhabitants.

10, Crostolo, with Guastalla	162,071
11, Panaro	189,216
12, Lower Po	257,534
13, Reno	379,010
14, Rubicon	254,723
15, Metauro	
16, Musone	680,000
17, Tronto	

III. East Lombardy, 9,350 square miles, 1,630,179 inhabitants.

18, Adriatic	216,500
19, Bachiglione	243,162
20, Brenta	284,066
21, Istria	89,634
22, Passeriano	383,305
23, Piave	105,902
24, Tagliamento	307,610

IV. Dalmatia, 7,228 square miles, 296,415 inhabitants.

	Square Miles.	Inhabitants.
1, Dalmatia Proper	4,480	100,491
2, Islands of Quarnaro	297	36,000
3, Dalmatian Islands	1,547	59,000
4, District of Ragusa	657	60,000
5, District of Cattaro	247	40,924

V. Territory of St. Marino, 30 square miles, and 7000 inhabitants.

History.] Venice is the most extensive of the component parts of this kingdom. The city was founded in the 5th century, by the Veneti from the opposite shore, on the islands where it now stands. At first each isle was governed by a consul, and afterwards by a tribune, till the year 697; when the first Doge was elected, and unlimited power conferred on him. In 1171, the power of the Doge was curtailed, and the sovereignty vested in the nobles. The Venetians having already extended their dominions over Istria, Dalmatia, Syria, and Lombardy, in 1204, possessed themselves of Candia, the principal islands in the Archipelago, and several

Greek provinces. After the war with Genoa, which lasted 130 years, and terminated in 1381, they were the first commercial power in the world, and continued to be so till the discovery of the Cape of Good Hope, by Varco de Gama. Since that time they have sunk into insignificance.

The Duchy of Milan, the territory of the ancient *Insubres*, was a part of the kingdom of Lombardy. Charlemagne appointed governors in it. It next fell to Germany, and affecting independence, was severely punished by the emperor Barbarossa; in 1153. Otho Visconti was proclaimed lord of Milan, in 1277, and the family possessed this opulent principality, till 1450. The first of them who took the title of duke, was John Galeazzo, in 1395. They were succeeded by the Sforza family, and on its failure, in 1536, Charles V. declared Milan a fief of the empire, and gave it to his son Philip II. of Spain, whose successors held it till 1706, when it reverted to Austria.

The Duchy of Mantua was taken possession of by Louis de Gonzaga, a German, in 1328, with the title of *vicar*. In 1432, it was made a marquisate, and a dukedom by Charles V. when Montserrat was annexed. In 1707, the last of the Gonz family was put under the ban of the empire, and the duchy overrun by the troops of Austria.

Mirandola was made a duchy from a county in 1619. Its ducal house was the family of Pico. The last duke, siding with Spain in the war of the succession, was put under the ban, and the duchy sold by the emperor, in 1711, to the duke of Modena.

Ferrara and Modena belonged to the family of Este, a small city in Padua, of which Azo was marquis. His descendants acquired Ferrara, Modena, Reggio, and Rovigo. Borsus, in 1452, was created duke of Modena and Reggio, and count of Rovigo, and in 1472, duke of Ferrara. Rovigo fell to Venice in 1500. The Este family failing of lawful heirs, in 1557, the Pope seized Ferrara. The emperor confirmed Modena and Reggio to the illegitimate heirs. In the war of the succession, the duke lost his possessions, but had them restored in 1748.

The Bolognese, the ancient seat of the *Boii*, became a republic under the emperors. Divided by two factions, one of them had recourse to Pope Nicholas II. He assumed despotic authority. The people revolted, and chose Thaddeus Pepoli their first magistrate. His sons sold the country to the duke of Milan. The people shook off this yoke, and in 1513 became subject to the Pope. In 1802 this territory was annexed to the Cisalpine Republic, and in 1805 to the French kingdom of Italy.

St. Marino was founded by a mason, of the name of Marino, in the 6th century. Turning hermit, he retired to this mountain. His sanctity drawing numbers to the spot, in time it became a state. The Pope took possession of it in 1739, but immediately gave it up. Exclusive of that instance, it always retained its freedom.

Istria was a part of the ancient Illyricum. After the first Punic war, the Romans annexed it to Italy. In the middle ages it belonged to the marquisate of Aquileia. In 1190 it was conquered by Venice.

Dalmatia was conquered by the Romans about 240 years B. C. subdued by the Goths, and reconquered by Justinian. The Slavi subdued it about A. D. 650. It then fell to Hungary, and in the 15th century the maritime parts to Venice. The people are still Slavonians, use their language and customs, and profess the Catholic religion.

Government.] The French emperor has been king of this monarchy, since its formation in 1805. His infant son also has this title, and if he and the family last, will probably some time hence enjoy the reality.

Population.] The population of Lombardy, contained in the table, is the result of the census in 1808 ; that of Dalmatia, of an enumeration in 1804. That of St. Marino is merely calculated. The amount of the respective numbers is 6,375,342. Hassel estimated the population, in 1809, to be 6,389,000.

Army and Navy.] The army consists of 8 regiments of infantry, 10 of cavalry, 3 of artillery, 1 of invalids, and 4 battalions of guards ; amounting to 40,000 men. The navy consists of 3 ships of the line, 5 frigates, and 16 smaller vessels.

Revenue.] The revenue of 1807 amounted to 119,000,000 *livres*, or 14,690,000 dollars. The debt in 1809, exceeded 20,000,000 dollars.

Cities.] Venice is built on a multitude of islands, in a marshy bay of the Adriatic. The town stands 5 miles from the continent. The bay is too shallow for large vessels to pass between. This marsh is separated from the Adriatic by some islands, a few miles from the town, which break the force of the high winds, and render the bay safe and quiet. The town is 6 miles in circuit. The streets are narrow, and the freestone pavements are slippery in wet weather. It contains 70 parish churches, 40 chapels, 18 oratories, 54 monasteries, 26 convents, 17 hospitals, 53 squares, 188 public statues, and 150 palaces. The houses, 15,000 in number, are built with little taste, and generally make a mean appearance. The population is 137,240. Numerous natural and artificial canals intersect the city. Over these there are about 500 bridges, the largest of which is the Rialto, over the middle of the great canal. Scarlet cloths, silks, looking-glasses, and gold and silver stuffs are extensively manufactured.

Milan, the ancient *Mediolanum*, stands in a fruitful and pleasant plain, near the Adda. Its wall has 22 gates, and is 10 miles in circuit, but half the inclosed ground is occupied by gardens. The citadel is a large hexagon, and is one of the strongest fortresses in Italy. The streets are broad and neat, the squares spacious and handsome, and the houses lofty. There are here 230 churches, 40 monasteries, 50 nunneries, and in 1805, 128,862 inhabitants. The cathedral is a vast structure, 500 feet long and 300 broad, built wholly of white marble. Milan was built by the Gauls, B. C. 358. A short canal connects it with the Adda, and a much longer one with the Tessino. About 2 miles from the city is an artificial echo, which will repeat the report of a pistol 60 times.

The environs are embellished with beautiful villas, gardens and orchards.

Bologna, the ancient *Felcina*, is situated in a beautiful plain, at the foot of the Appennines. The river Savona washes its walls, and the rivulet Reno passes through it. A solid and lofty brick wall, 5 miles in circuit, surrounds the city. The streets are too narrow. The public buildings are magnificent. Here are near 200 churches, 35 monasteries, and 38 convents. The cathedral is noble. The theatre also is very large and beautiful. Many of the houses are splendid, and have lofty porticoes. The population, in 1805, was 63,420. The manufactures are silks, velvets, laces, crapes, paper, glass, leather, bottles, playing cards, toys, perfumes, and confectionary. The Bologna hams, sausages, and dried tongues, are celebrated. This is one of the most agreeable cities in Italy.

Verona lies in a plain on both sides of the Adige, over which there are 4 stone bridges, the longest 348 feet. The fortifications are some of the strongest in Italy. The streets are narrow, crooked, and dirty, and the houses mean. The population, in 1805, was 55,887. The environs are remarkably pleasant and fertile. Olives, oil, wine, linen, woollens, and sewing-silk are exported.

Padua, the ancient *Petavium*, is situated on a tributary of the Brenta. The walls are very extensive, but much of the inclosed space is without buildings, and many of the houses are unoccupied. The houses are generally well built. Population, 34,000. Here are 26 churches, 23 monasteries, 18 nunneries, and 4 hospitals. The church of St. Antonio is singularly magnificent. The streets, however, are narrow, dark, dirty, and ill-paved, and many of them are grass-grown. The first of historians* was a native of Padua, and a cenotaph is erected to his memory.

Brescia, the *Brixia* of the Romans, was built by Brenus. It stands on a beautiful plain, on the Garza, is a league in circuit, well fortified, having a strong castle on a hill, and surrounded by walls, which have 5 gates. The streets are handsome, and the buildings good. The number of inhabitants, in 1805, was 41,972. It has 20 churches, and 30 convents. Here are extensive manufactures of linen, and the fire-arms, swords, and cutlery of Brescia, are celebrated. This was the birth-place of Tartaglia, the mathematician, and of Gambara, the poet.

Modena, the ancient *Mutina*, is built between the Secchio and Panaro, and surrounded by fortifications. The streets are broad and straight, and the houses ornamented by porticoes. In 1805, the population was 26,884. Tasso and Corregio were born at Modena.

Bergamo, anciently *Bergomum*, stands at the foot of a mountain, and is strongly fortified with walls, bastions, and ditches. The inhabitants, in 1805, amounted to 24,459, and are noted for their industry. Their silks, woollens, and serges are celebrated.

* Livy.

Ferrara stands on a branch of the Po, and is 4 miles in circumference. The streets are very broad and regular, and the houses uniform. There are many magnificent palaces, and beautiful churches. The number of churches is 100, and of convents 38. The population in 1805, was 24,444. Ariosto lies buried here, and Tasso here wrote his "Jerusalem Delivered."

Pavia, the ancient *Ticinum*, stands in a beautiful plain, on the Tesino. It was founded by the Gauls. The streets are broad and straight, but the houses are indifferent, and it has little the appearance of having been the capital of the kingdom of Lombardy. The fortifications are decayed, and the citadel in ruins. It contains 23,237 inhabitants, 19 churches, and 38 convents. Francis I. was taken prisoner, while besieging this town, in 1525.

Ravenna stands on the Montone, 3 miles from its mouth, and was founded by the Thessalians. When the capital of the exarchate, it stood on a bay of the Adriatic, but the sea has gradually retired. The iron rings are still in the wall, to which ships were anciently fastened. It contains several churches, and 24 convents. Here are some remains of the palace of Théodoric, king of the Ostrogoths, and in a wall of the front, is his coffin of porphyry. The tomb of Dante is in a Franciscan convent. He died here in 1321. The citadel and fortifications are in a ruinous state.

Cremona was built 391 years B.C. It stands on a delightful plain, on the Oglio and the Po, and is 5 miles in circumference. A canal passes through the town, connecting the two rivers. The streets are wide and straight, but the houses are not well built. Here are 40 parish churches, 43 convents, and 21,039 inhabitants.

Mantua, the birth-place of Virgil, was founded many years before Rome. It stands on a lake, formed by the Mincio, which is 10 miles long and 2 broad. The walls have 8 gates, and are 4 miles in circuit. The water divides the city into two equal parts, connected by 6 bridges. The streets are long, broad, and straight, with handsome stone houses, fine squares, and stately churches. There are 39 churches, 11 oratories, and 40 convents within the walls ; and 5 churches and 7 convents in the suburbs. The population is 20,343.

[*Islands.*] The isles of Quarnaro lie in and near the Gulf of Fiume, S. E. of Istria. The chief are Cherso, Veglia, Arbo, Pago, and Melada. Cherso, the largest, is 150 miles in circumference. They are all stony and mountainous, but yield a great deal of wood, cattle, wine, oil, honey, and some salt. The town of Cherso contains 3000 inhabitants, and is in the centre of the island. The town of Veglia, is in the W. part of that island, has a harbor and castle, is the see of a bishop, and contains 3000 inhabitants. The town of Pago contains 2000.

The chief Dalmatian isles are Grossa, Brazza, Lesina, Curzola, Meleda, Lagosta, Cazzola, Cazza, and Lissa. The high parts of these islands are barren and rocky ; the plains are fertile. The chief productions are wine, oil, figs, almonds, saffron, honey, aloes, oranges, wool, cheese, salt, and wood. Salt fish is the

chief export. The town, Lesina, has a large, strong, and safe harbor, is surrounded with walls, and is the see of a bishop. Curzola also has a good harbor, and is well fortified.

CHAPTER IV.

KINGDOM OF NAPLES.

EXTENT, DIVISIONS, HISTORY, RELIGION, GOVERNMENT, POPULATION, ARMY AND NAVY, REVENUE, CITIES, BAYS, SOIL AND PRODUCTIONS, ISLANDS.

Extent.] THIS kingdom lies in the southern extremity of Italy. The late possessions of the Pope lie on the N. W. The Straits of Messina separate it from Sicily, and those of Otranto from Turkey. On the Adriatic it reaches to lat. 42° 50', N. on the Mediterranean, to 41° 15'. The greatest length is about 320 miles ; the breadth varies from 100 to 30. The number of square miles is 31,505.

Divisions.] Naples is divided into 12 provinces, which, with their population in 1789, as given by Galanti, are as follows.

Adriatic Provinces.		Mediterranean Provinces.	
Farther Abruzzo	258,000	Farther Calabria	408,000
Hither Abruzzo	227,000	Hither Calabria	345,000
Molise	159,000	Basilicata	477,000
Capitanata	364,000	Terra di Salerno	481,000
Terra di Bari	289,000	Terra di Lavora	1,245,000
Terra d'Otranto	293,000	Central. Principato Ultra	335,000

History.] The early history of this country has already been given. The chief epochs of its modern history are the following. Arechis, son-in-law of the last king of the Lombards, when their kingdom was destroyed by Charlemagne, was duke of Benevento, a dukedom which then comprised the greater part of Naples. The city of Naples still belonged to the Greeks. Compelled by Charlemagne to acknowledge him as king of Italy, Arechis soon renounced his allegiance, and assumed the title of king. The Saracens first repeatedly invaded the country from 836 to 896, when they were driven out, during which period the Greeks got possession of the south. In 1015 numerous Normans came into the country, and in 1056, under Robert Guiscard, became the ruling nation in Naples, and, in 1071, in Sicily. In 1195, the emperor got possession of both countries, and in 1266 they were granted by the Pope to Charles, duke of Anjou. After the Sicilian vespers, 1282, Sicily was seized by a fleet sent by the kings of Arragon, but Naples continued to acknowledge the line of Anjou, which expired in the infamons Jean, 1382. In 1303, the two kingdoms were formally disjoined, Sicily falling to Frederic of

Arragon, Naples belonged to Charles' successors, till the beginning of the 16th century, when king Frederic resigned it to Louis XII. on being created count of Anjou ; but the French, in 1504, were compelled by the Spaniards, to evacuate the country. From that time till 1707 they retained it, when the emperor took it, and kept it till 1734. Then the Spaniards recovered it, and kept it till the year 1806, when the king withdrew to Sicily, which he still retains, and Joseph Bonaparte took possession of Naples, who has since resigned it for another kingdom.

Religion.] The inquisition was never established in Naples. The catholic religion was established ; but protestants had considerable privileges. Before the late revolution, one third of the whole property of the kingdom was estimated to belong to the ecclesiastics. Naples then had 21 archbishops, and 110 bishops. The whole number of the clergy in 1803, was 72,000.

Government.] The late king was nearly despotic. The states consisted of nobility and commons, and met once in two years. The chief business was to deliberate on the customary free gift to the crown. The high colleges were the council of state, privy-council, treasury, Sicily council, and council of war. The nobility were extremely numerous, and generally poor.

Population.] The royal calendar for 1803, gives the population of Naples at 4,963,502.

Army and Navy.] In 1809, the number of troops was 21,600 national troops, and 30,000 French auxiliaries. At that time only 3 frigates, and a few galleys and gun-boats, amounting in all to 8 sail, remained of a navy, which, in 1790, had 4 sail of the line, 8 frigates, and 27 smaller vessels, and was manned by 2,874 marines.

Revenue.] The revenue, in 1808, amounted to about 9,880,000 dollars ; the expenditure nearly equalled it ; and the debt amounted to about 26,000,000 dollars.

Cities.] Naples, the ancient *Parthenope*, and the sepulchre of Virgil, was built by a Greek colony from Chalcis. It stands at the head of a large harbor of the Tuscan sea, of a nearly circular shape, and 12 miles in diameter ; all the borders of which are ornamented by mulberry, olive, and orange groves, by extensive vineyards, by hills, dales, and downs, covered with verdure, and by many delightful villas and flourishing villages. It is built in the form of a vast amphitheatre, sloping from the hills towards the bay. On the east lie the rich plains leading to Vesuvius, which is in full view beyond them. On the west are the grotto of Pausilippo and the hill of Virgil's tomb. On the north fertile hills gradually rise from the shore ; and on the south is the bay, confined by two promontories of Misenum and Minerva, and apparently separated from the Mediterranean, by the islands Procida, Ischia, and Caprea. The walls are only 9 miles in circuit, but the circumference of the whole town is 18. The streets are generally broad and well paved. The Strada di Toledo is one of the handsomest in Europe. Few towns are better built than Naples. Most of the houses are five and six stories high, with flat

roofs, on which are placed numbers of flower vases, or fruit trees, in boxes of earth. The town contains 149 convents, 45 hospitals, 106 churches, 130 oratories, and 5 seminaries for ecclesiastics. The exterior of the churches, their paintings and marble ornaments are inferior to those of Rome ; but every thing else about them, in beauty and richness surpasses all of the kind in Italy. There are five piazzas, or large covered walks, for the nobility, and one for the commonalty. The population of the city, in 1789, was 412,489. Few of these are employed in any useful labor, and the streets are constantly so much thronged with idlers and saunterers, that the noise of carriages is completely drowned in the aggregate clack of human voices. The number of priests, monks, fiddlers, nobility, footmen, and *lazaronis*, surpasses belief. These last are persons not regularly brought up to any trade, but ready to be hired for any kind of labor. They constitute a distinct class of people, have their chief or captain, live in the open air day and night, and are miserably destitute of clothing and comfort. Their number is about 40,000. Numerous banditti also make it their steady residence, and the number of castrati is so great, that many of them cannot procure employment in their professional business, and have therefore been admitted among the secular clergy. Mobs and riots however are very unfrequent in the streets, and the common people are rarely inflamed by ardent spirits. The lawyers are among the most respectable citizens ; their numbers are very great, and the inhabitants are extremely litigious. Provisions are plentiful and cheap ; poultry, fish, and game, are abundant, and the finest fruits are to be had throughout the year. Peas, asparagus, and other vegetables, are ripe in January. Ice is always abundant, and ice punch and creams are constantly hawked about the streets. The trade of Naples is not extensive. The chief articles manufactured are silk stockings, soap, snuff-boxes of tortoise shell and lava, marble furniture, and ornaments. Their pastes, confections, and liqueurs are excellent. Beside these articles they export silk, oil, sulphur, manna, rosemary, resin, tartar, figs, and other fruits. The harbor has a canal, and a mole 500 paces long, for its greater security. A block house and batteries defend the mouth. A lofty pharos points out its entrance. The dock-yard and magazines are spacious. Castello Nuovo is on the east side of the harbor, and several batteries on the points of land below have a point blank shot. Castello del Uovo is on an island on the west side, which is connected with the town by a bridge. St. Elmo is a castle, on a mountain west of the town, and resembles a star of six rays, which are hewn out of a rock. Its subterranean works are wide, lofty, and bomb-proof. It entirely commands the city. Water is conveyed to the town by an aqueduct, a noble monument of antiquity, from the foot of Mount Vesuvius.

Taranto, the *Oebalia* of the aborigines, the *Taras* of the Greeks, and the *Tarentum* of the Romans, was taken and repaired by a colony of Spartans, under Phalanthus, 707 years B. C. It is built on a small peninsula, at the head of the Gulf of Taranto. The

harbor was once excellent; it is now too shallow to admit anything but fishing boats. The streets are narrow and dirty, and the houses indifferent. Population in 1789, 18,457.

Bari is built on a rocky peninsula, on the Adriatic, and is defended by a double wall of an old castle. The houses are generally built on the ruins of former edifices. The trade is extensive. The population in 1789, was 18,191.

Reggio is in farther Calabria, nearly opposite Messina. Here are manufactures of stockings and gloves, and the exports are chiefly olive-oil, silk, and fruits. Population 16,439.

Bays.] These are the Gulf of Manfredonia, on the Adriatic, the Gulf of Taranto, in the south, and the bays of Policastro, Salerno, Naples, and Gaieta, on the Mediterranean. The Straits of Messina separate Calabria from Sicily, and the Straits of Otranto lie between Otranto and Albania. The peninsula on the east side of the Gulf of Taranto, is the province called Terra d'Otranto, and contains 2611 square miles; that on the west side includes the two Calabrias, and contains 6714 square miles.

Soil and Productions.] The soil of Naples is every where of unrivalled fertility, being productive to an exuberance, of wheat of many species, barley, maize, rice, flax, manna, and saffron, olives, figs, oranges, pomegranates, lemons, grapes, and many other kinds of fruit, and of every species of vegetable in the greatest perfection. Silk is raised in great abundance. Alum, vitriol, sulphur, rock crystal, and marble, are abundant. There are specimens, also, of gold, silver, lead, and copper. Their chief manufacture are of iron, silk, woollen, and glass. A species of shell-fish, at Taranto, called *finna*, about an ell long, affords a tuft of fine hair or threads of polished green color. Out of this the women knit gloves, stockings, and other articles of dress. Various sorts of lizards, black snakes, and the tarantula, are very common throughout the country.

Neapolitan Isles.] In the Adriatic, in lat. 42, and close on the coast, are the small isles of *Tremiti*, *St. Domino*, *Capraria*, and *St. Nicolo*. This last is 8 miles in circumference, and contains a few little hamlets, a convent, a castle, and 25 soldiers. *Capri*, the ancient *Caprea*, and the seat of Tiberius' debaucheries, lies at the mouth of the bay of Naples. It is 8 miles in circumference, mountainous, fertile, and abundant in game. *Ischia*, on the other side of the same bay, is 10 miles round, and is believed to be the offspring of a volcano. It is also mountainous, and abounds in fruits and game. Its white wine is noted. The air is fine and healthy. Ischia, its capital, is a bishop's see, and contains 3,130 inhabitants. *Nisida*, farther in the bay, is smaller, and is merely a large garden, laid out in slopes and terraces. *Procida*, N. of Ischia, produces abundance of fruit, and excellent wine, and also of pheasants and partridges. It is 6 miles in circuit, and contains 4000 inhabitants. The Ponzian Isles, *Ponza*, *Palmaria*, and *Zanona*, lie off the Bay of Gaieta. Ponza, the largest, contains a town, a harbor, and considerable salt-works.

CHAPTER V.

KINGDOM OF SICILY.

SITUATION, EXTENT, NAMES, DIVISIONS, ORIGINAL POPULATION, HISTORY, RELIGION, GOVERNMENT, POPULATION, ARMY AND NAVY, REVENUE, MANNERS AND CUSTOMS, LITERATURE, CITIES, MANUFACTURES AND COMMERCE, CLIMATE, SOIL AND AGRICULTURE, RIVERS, MOUNTAINS, BOTANY, ANIMALS, MINERALS.

Situation.] WE have already had occasion to speak of Sicily as an island in the Mediterranean, separated from Naples by the Straits of Messina, which, in the narrowest part, are only 3 miles across.

Extent.] The length of the island, from Cape Passaro to Cape Boco, is 170 miles. Its breadth varies from 120 to 50, and will average about 80. The number of square miles, according to Templeman, is 12,880.

Names.] The ancients called the island *Trinacria*, and *Triglænetra*, from its triangular shape; *Sicania*, from the *Sicani*, a people of Spain, and *Sicilia*, from the *Siculi*, a people of Italy, who successively possessed it.

Divisions.] The provinces are three in number, and are called vallies. The following is a list of the Sicilian territories, with their population, as given in the royal calendar of 1803.

Val di Mazzara	643,000
Val di Demona	521,000
Val di Noto	459,000
Lipari Islands	18,000
Aegatian Islands	12,000
Pantallarea I.	3,000
<hr/>	
	1,656,000

Hassel estimates them in 1809, at 1,056,000.

Original Population.] Leaving the *Cyclopes* and *Laestrigones*, where we find them, in fable; the first occupants of the island were the *Sicani*, a Spanish colony. Some Trojans landing in the island, after the destruction of their city, built Eryx and Egesta, and became one people with the *Sicani*. The *Siculi*, several centuries after, went over from Italy, and got possession of the greater part of the island. About 300 years after, the Greeks planted numerous colonies here. One of these, under Archias of Corinth, one of the Heraclidae, laid the foundation of Syracuse, B. C. 732, which after a time became the mistress of the island.

History.] The following are the chief epochs of Sicilian history.

1. The situation of the island under the *Sicani*, *Siculi* and *Greeks*, who successively obtained the dominion of the whole island.

2. The invasion of the island by an immense army and fleet of Carthaginians, under Hamilcar, the son of Hanno, B. C. 481. Gelon, king of Syracuse, kills or captures every man of them, and sets fire to their fleet.

3. The Athenian invasion, under Nicias and Demosthenes, B. C. 416, in which, after a three year's war, they were entirely cut off.

4. The Carthaginians invade the island a second time, in 404 B. C. and again in the time of Hannibal, but at length the whole is subdued by the Romans, B. C. 198.

5. The overthrow of the Roman domination by Genseric, king of the Vandals, A. D. 439, who yielded it to Odoacer, king of Italy. But in 535 it was recovered by Belisarius, and made a part of the eastern empire, till 828.

6. The Saracens, who had before repeatedly disturbed the tranquillity of Sicily, in 828, completely subdued it, and for more than 200 years the Mahometan standard waved upon the walls of Syracuse.

7. The Normans, under Roger, brother of Robert Guiscard subdue the Saracens, and get possession of the island, A. D. 1071. Roger is made count of Sicily, in subordination, however to his brother, the king of Naples. The succeeding great events of Sicilian history are enumerated in that of Naples.

Religion.] The Roman Catholic is established, but Jews are tolerated. There are 2 archbishoprics and 7 bishoprics. A sovereign ecclesiastical tribunal judges of all matters and disputes in which the clergy are concerned. The number of churches, convents, and religious foundations, is considerable ; the buildings of which are handsome, and the revenues great.

Government.] The monarchy is hereditary, but is not absolute. The Parliament consists of clergy, nobles, and deputies from some of the towns. The archbishops, bishops, abbots, and priors, to the number of 66, constitute the spiritual arm, 229 nobles, the military arm, and 43 representatives of free towns, the demaniale arm. Out of each arm four deputies are chosen to transact business. No tax can be imposed without the consent of the Parliament ; but the most powerful of the members are always made dependent on the court. The whole number of nobles of every class, is 616.

Population.] By the table, taken from the royal calendar of 1803, the whole population of the island of Sicily is 1,623,000, and of the dependencies 33,000 : in all, 1,656,000. This however appears to be derived from the census of 1797, which gave the number of inhabitants 1,655,536, of cities and market towns, 340, and of houses 268,000.

Army and Navy.] In 1809, the number of regular troops was 10,000 men, country militia 8000, and a body of British auxiliaries. The navy at that time consisted of 1 ship of the line, 2 frigates, and 5 smaller vessels.

Revenue.] The revenue amounts to about 2,670,000 dollars, of which about 1,080,000 arise from the royal domains, and the land-tax. Hassel also gives an estimate of the whole value of

moveable and immoveable property in the island, amounting to 111,612,400 dollars.

Manners and Customs.] The Sicilians are described as bigotted Catholics. They have always discovered an ardent love of liberty. They are animated in conversation, and in the art of gesticulation excel even the French. Their women have remarkably beautiful hair, they marry very young, and early lose their beauty. Both sexes have very dark complexions. Both sexes are amorous, and there is perhaps less chastity here than in Italy. Cisbeos also are nearly as common. The whole nation are poets, even the-peasants. These last are much oppressed by the nobility. Selfishness, revenge, and a want of good faith, are too common characteristics of the people. Their climate and soil also have contributed to render them extremely indolent.

Literature.] There is a university at Catania, the only one in the island. It has professors of languages, mathematics, philosophy, law, physic, natural history, botany, horsemanship, fencing, and dancing. There is also a college in the same town for the education of nobles. The students in physic and law often enter themselves at Palermo with practitioners; but if they wish for employment, they must complete their education at Catania. The common people here, as in all Catholic countries, are extremely ignorant.

Cities.] Palermo, in the Val di Mazzara, the ancient *Panormus*, is the capital of the island, and is situated at the bottom of the Gulf of Palermo, on the north coast. The harbor is large and dangerously open to the swell of the sea, and its entrance is defended by two strong citadels. The wall is nearly circular. The best houses stand chiefly on two wide, uniform, and well built streets, of about a mile in length, that divide the city into four parts, and cross each other at right angles, where there is an octagon space, adorned with fountains and statues. In these streets each window has its balcony with an iron railing. The other streets are narrow, crooked, wretchedly paved, and dirty. The streets are lighted with reverberating lamps. The kennels on each side of them, become torrents in wet weather, and moveable bridges are provided for crossing them. It contains numerous churches, 8 royal abbeys, 5 seminaries, 71 convents, and several hospitals. The palace is a magnificent structure, and is flanked with lofty towers. The cathedral is a Gothic building, very large, with 4 lofty towers, and supported within by 80 pillars of oriental granite, in which are the tombs of some of the Norman kings, and of the emperors Henry V. and Frederic II. of most beautiful porphyry. The population, about 50 years since, was 102,106. Stolberg says it had increased in 1792, and was then probably 120,000. The principal amusements are the *Conversazioni*. There is one public one, which is open every evening, from sunset till midnight, when the party breaks up, and resorts to the Marina, a handsome quay, to enjoy the fanning breeze, take refreshments, and listen to the serenades, which enliven the still hour. The commerce of Palermo is extensive, and it has impor-

iant manufactures of silk and woollen. The sirocco winds are here intensely distressing in the morning. The sea breeze cools the air about noon. The environs abound in fruit trees, particularly oranges, lemons, and Indian figs. Great numbers of the nobility have villas in the neighborhood.

Messina, the *Zancle* of the Greeks, and the *Messana* of the Romans, stands on the east side of the island, a little south of the Straits, and 6 miles from the opposite coast. It has a spacious harbor, in the form of a crescent, esteemed one of the best in the Mediterranean, being 5 miles in circumference, and very deep, and the quay belonging to it extends a mile in length. It is defended by a strong castle, and other fortifications, and has an arsenal in good order and well supplied. Mountains, at a little distance, completely cover the town, and part of the city is built on the declivity of the intervening hills. The streets are narrow, and the houses generally gloomy. The Palazzetta is a regular ornamental range of lofty houses, following the semicircular bend of the port for one mile and five rods. Had the design been completed, it would have been the handsomest street in Europe. The population, according to Stolberg, is 36,000, and the number of houses, according to Hassel, 12,196. Vast numbers of them have no occupants. Provisions are very plenty, and rents are almost gratuitous. The chief manufacture is that of silks. Fishing, cultivating vines, and mulberry trees, and breeding silk-worms, employ many of the inhabitants. The commerce is extensive.

Catania, the ancient *Catana*, was built by the early Greek settlers, about 918 years B. C. It is 50 miles S. of Messina, and stands not far from Mount Etna, near the mouth of the Indicello, which flows into the Gulf of Catania. It is built, walled, and paved with lava, by which the city has been repeatedly overwhelmed. The principal streets are long, broad, and straight. It contains 4160 houses, and about 40,000 inhabitants. The number of convents, churches, and palaces, is very great. The eruption of Etna, in 1693, attended by an earthquake, entirely destroyed the city, when 11,000 persons, who had fled to the cathedral for shelter, perished by the fall of the church. In 1669, also a torrent of lava burst from the side of Etna, inundated a space 14 miles in length, and nearly 4 in breadth, rose over the walls, and burying a part of the city, at length rolled into the sea.

Modica, near the S. E. Cape, contains 23,500 inhabitants.

Siragoza, or Syracuse, is on the east side of the island, about 35 miles S. S. E. of Catania. It has a noble harbor, which is strongly fortified. Ortigia, the smallest of the four grand quarters of which the city was once composed, alone remains. It is 2 miles in circuit. The other three, are nearly 22 miles round, but the whole of this is covered with ruins, intermixed with vineyards, orchards, and corn fields, the fences of which are made of broken columns and walls of marble. The houses are not well built. The fountain Arethusa, supplies the town with water. The number of houses is 4261, and of inhabitants 17,044. The cathedral is an ancient temple of Minerva. Syracuse was the scene of

the exertions of Archimedes. His mirrors here set fire to the Roman fleet, and his engines lifted their vessels out of the water, and dashed them against the rocks.

Of the remaining towns, Augusta has 15,000 inhabitants, Ali-cate 12,000, Calascibetta 10,000, Caltagirone 16,500, Castel Vetrano 11,000, Castrogiavanne 11,000, Girgenti 11,376, Noto Nuovo 11,500, Piazza 13,500, Ranuzzo 14,000, and Trapani 17,000.

Manufactures and Commerce.] Silk is the most important manufacture. Palermo employs 900 looms, Messina 1200, and Catania still more. Wines are made in every part of the country. The salt-pans of Trapani are the most productive. Corn is the staple of the island, and immense quantities are exported. Silk is the second source of riches. The annual value sent out of the island is about £200,000 sterling. Girgenti exports the most almonds. Two thousand chests of oranges are annually sent from Messina, and 6000 of pickled lemons, and as many more from the rest of the island. Two hundred and eighty barrels of lemon juice, and 27 cwt. of bergamot juice, are exported. Pistachio nuts and carob beans are also an article of trade. The Sicilian commerce has always been shackled by a duty on exports.

Climate.] The weather is so warm, even in January, that the shade is found refreshing. No chilling winds are felt, except a few days in March. The summit of Etna presents the only appearance of winter. The air, however, is wholesome, and the sea breezes of summer are highly refreshing. The Sirocco or warm wind from Africa, is very common in the early part of the day. Though attended with a slight current of air, yet, when it prevails, the waves of the sea foam and roar unceasingly. It brings humidity: the clothes adhere to the body, at its touch, the limbs lose their strength, and the mind its energy.

Soil and Agriculture.] Infertility of soil probably Sicily is not surpassed by any country on the globe. Under its ancient cultivation the Romans called it *Romani Imperii Horreum*, and Diodorus, who wrote on the spot, assures us that it produced wheat and other grain spontaneously. Its plains at present, without inclosures, without manure, and almost without culture, rival in their fertility the rich fields of the Netherlands and of Lombardy. The principal kinds of wheat, the *cicirello*, which produces 60 fold, the *ventina* and *trentina*, 20 and 30, the *triminia*, which is reaped in 3 months, the *barbamera*, and the *winter wheat*. Maize is extensively cultivated. Flax is abundant. Rye is seldom seen, and few oats are grown, the horses being chiefly fed on barley. The culture of the vine, the mulberry, and the olive are universal, and the red and white muscadet of Syracuse, improperly called *Calabrian* wines, *Castelvetrano*, and the *Amarenaforte*, are among the best wines that are made. Sugar, honey, wax, and saffron, are among the objects of the husbandman's attention.

Rivers.] These must of course be small. The Salso, the ancient *Himera*, rises out of the high mountains of Madonia, in the north part of the island, and flows S. about 70 miles, to the African sea, as it is called, near Alicata. Its waters are rendered salt

by the salt springs of Castro Giovanni. The Giaretta, the ancient *Symetus*, rises on the N. side of Ætna, and passing the west skirts of the mountain, falls into the sea, S. of Catania. The Belici, in the W. part of the island, runs S. W. The Termini runs northward, and empties at Termini. Lake Biveri, in the E. near Augusta, is the only piece of water entitled to that name.

Mountains.] The sources of the rivers indicate a series of elevated land, reaching from the western extremity of the island to the promontory of Pelorus, or Faro, in the N. E. nearly parallel with the northern coast, and at no great distance from it. The ancients called the eastern half of the chain the mountains of *Here*, or *Juno*. The whole chain is now called Peloris. In this range the mountains of Madonia, near the centre, probably present the highest summits. Pelorus is not remarkable for its elevation.

Mount Ætna is in the eastern part of the island, called Val di Demone, from a notion that the numerous caverns of Ætna are inhabited by demons, and other wicked and miserable beings. The figure of the mountain is that of an obtuse truncated cone, extended at the base, and terminating in two eminences, at a considerable distance from each other. The circumference of the mountain is 180 miles; its height, according to Sir George Shuckburgh, is 10,954 feet, and the circumference of the visible horizon on the top of Ætna, 1093 miles. Over its sides are scattered 77 cities, towns, and villages. From Catania, which stands at the foot, to the summit, is 30 miles, and the traveller passes through three distinct climates, or zones, the *cultivated*, the *woody*, and the *desert*. The lowest, or cultivated zone, extends through an interval of ascent of 16 miles. Its circumference is estimated at 180 miles, and its area at 220 square leagues. It is bounded by the sea to the S. and S. E. and elsewhere by the rivers Symetus and Alcantara, which almost surround it. The fertility of this region is wonderful, and its fruits are the finest in the island. Its lava flows from numerous small mountains, dispersed over the immense declivity of Ætna, of a conical form, about 2 or 3 miles in circuit, and 300 or 400 feet high. The woody region forms a zone of the brightest green all round the mountain. It reaches about 8 miles up the mountain, is 80 in circumference, and comprehends a surface of 45 square leagues. The trees are unusually verdant and stately, and consist of various fruit trees, the hawthorn, chesnut, oak, beech, and pine. The desert region is marked by a circle of snow and ice, and extends 6 miles from its border to the summit. It is generally flat and even. The summit itself is a plain covered with scoriae, ashes and sand, and with snow and ice. The cold here is benumbing, and the wind often tempestuous. The upper edges of the crater of the southern summit, when visited by Spallanzani, were broken and indented, and formed an oval a mile and a half in circuit, the longest diameter of which was from E. to W. Its internal sides formed an irregular funnel, and abounded with concretions of muriate of ammonia. The bottom of the crater was nearly an horizontal plain, about two thirds of a mile in circuit, in which there was an

aperture about 5 rods in diameter. Within this was a liquid ignited matter, undulating and boiling, and through it a column of dense white smoke ascended perpendicularly about 20 feet in diameter. The northern eminence is a quarter of a mile higher, and has a crater about half as large as the other.

Botany.] The fruits of Sicily are oranges, lemons, grapes, raisin grapes, citrons, figs, olives, almonds, pomegranates, Bergamot oranges, mulberries, dates, apricots, nectarines, peaches, plums, and currants. Most of these grow wild, and often form extensive forests. They are all in high perfection.

Animals.] The horses of Sicily are celebrated by Sophocles, Pindar, and Virgil. They far surpass those of Italy generally, and are strong, handsome, animated and active. The mules are large and strong, and are chiefly used in the country among the mountains. The cattle pasture the whole year. They are all, without exception, red, and have prodigious horns. They are short, strong, and numerous. The sheep and goats are of a good kind. The hogs are universally black. The wild boar, the roebuck, the wild goat, the chamois, and many species of smaller game are found in the mountains. The race of bears and stags is thought to be extinct. Lizards of various kinds abound. Snakes of a prodigious size are occasionally met with in the forests. The aspic and the scorpion, both poisonous, many smaller kinds of snakes, and the harmless scorpion, are not unfrequent. Wasps, ox-flies, and gnats, are peculiarly venomous.

Minerals.] The mountains produce emeralds, jasper, agate, porphyry, lapis-lazuli, and catochite. Between Taormina and Messina, are mines of gold and silver; they are not worked. Valuable mines of antimony are found near Fiume di Nisi. Abundance of coral is found on the coast.

SICILIAN ISLES.

Lipari Islands.] These were the *Hephaestiades* of the Greeks, and the *Æoliae* and *Vulcaniae* of the Romans. They produce alum, sulphur, cinnabar and nitre, corn, almonds, currants, figs and raisins, wines, and contain 18,000 inhabitants. Lipari, the largest, is of an irregular shape, about 18 miles in circumference. It is healthy and fertile, and exports corn, wine, almonds, figs, raisins, sulphur, alum and bitumen. Here are some noted hot-springs. Lipari, the capital, is a bishop's see, and strongly fortified by nature and art. This and all the other islands are high, and their shores are steep. They have all vast caverns. Herc, say the poets, dwelt *Æolus*, and in these caverns he confined the winds. When he disappeared, his turbulent prisoners broke loose, and have never ceased to raise frequent storms and tempests around their gloomy prison.

Volcano, the ancient *Hiera*, is 6 miles S. of Lipari. It has two volcanoes. Vulcan here made the armor of *Aeneas*.

La Salina, 3 miles N. of Lipari, and 8 in compass, is uninhabited. It contains a chapel dedicated to the Virgin Mary, and a few vineyards.

Euonymos is inconsiderable.

Panaria, 20 miles E. N. E. of Lipari, and 7 in circuit, is uncultivated, but uninhabited.

Strombolo, 30 miles N. E. of Lipari, and 10 in circuit, is a burning mountain, of extraordinary height, pouring forth incessant fire and smoke. It has no inhabitants.

Felicudi, 30 miles W. of Lipari, and 10 in circuit, is uninhabited, and dangerous to approach, on account of rocks and shoals.

Alicuda, 15 miles W. of Felicuda, is inhabited by a few fishermen, and produces heath and weeds.

Ustica, 80 miles E. N. E. of Lipari, is desert and uninhabited.

Aegatian Islands.] These lie at the western end of Sicily, near Trapani. They are three in number, Lavenzo, Maretamo, and Favignana, the ancient *Phorbantia*, *Ægusa*, and *Hiera*. They are all lofty. They produce corn, cheese, good wine and figs, and pomegranates, and breed rabbits and the chamois. Population 12,000.

Pantalaria, the ancient *Cosyra*, is half way between Sicily and Cape Bon, and about 60 miles from each. It is 25 miles in circuit, abounds in hills, woods, corn fields, wines, oil, fruits, vegetables, and particularly in cotton. The inhabitants, 4000 in number, breed many cattle and goats. They are industrious, and are excellent seamen.

KINGDOM OF SARDINIA.

The island is 160 miles long, and 70 broad, and contains, according to Azuni, 9420 square miles. Its Greek names were *Ichmusa*, *Sandaliotis*, and *Sardo*.

It is divided into four provinces, which, with their population in 1780, follow.

Names.	Situation.	Population.	Towns.
Cagliari	S. E.	115,541	Cagliari
Arborea	S. W.	130,974	Oristano
Gallura	N. E.	71,428	Terra Nuova
Logodori	N. W.	133,544	Sassari.

The Phenicians and Greeks colonized the island. The Carthaginians dispossessed them, and yielded it to the Romans, who were driven out by the Saracens, in the 8th century. The Genoese next took it, and next the Spaniards, who were expelled by the emperor in 1708. The Spaniards recovered it in 1713, but lost it two years after, when it fell to the duke of Savoy, who then took the title of king of Sardinia. When the king, in 1792, lost his continental dominions, he removed to Sardinia. The

nearness of Corsica renders him little more than a tributary of France.

The religion is the Roman Catholic. There are 3 archbishoprics and 4 bishoprics, and the clergy enjoy great immunities and emoluments.

The government is an absolute monarchy. The number of inhabitants in 1780 was, according to Azruni, 451,487; the number in 1788, was 456,990. Many of the nobility and others removed with the government from the continent; and Hassel estimates the population in 1809 at 520,000. The number of regular troops was then 4000, besides a considerable number of country militia. The revenue also was then 644,750 dollars. The Sardinians are represented as proud, brutish, ignorant, and indolent. The nobility are exempt from taxes, and for all offences, except treason, are tried by seven of their peers. While they riot in wealth and luxury, the lower classes are plunged in indigence and slavery. The language is the Spanish.

Cagliari, anciently *Calaris*, is the capital. It stands in the S. at the head of the bay of Cagliari, and is built on the declivity of a hill. That part of the town near the shore has a mean appearance; the rest is well built and handsome. It contains 6 churches and 23 convents. The cathedral is magnificent. The population is about 50,000, and the commerce is considerable. The harbor is large, deep, and safe, sheltered by an island, and defended by a castle and battery.

Sassari is in the N. W. on the river Tarres, 7 miles from the sea. It contains several churches, 16 convents, and 30,000 inhabitants. In the neighborhood are mines of gold and silver.

Oristano, or Oristagni, stands on the gulf of Oristano, on the west coast, among marshy grounds and stagnant waters. The harbor is shallow. Population 5000.

Alghieri is on the west coast, north of Oristano, and contains 6000 people. It has a coral fishery.

The air of the island is unwholesome, and the Romans therefore fixed upon it as their place of banishment. The soil when cultivated is fruitful, yielding corn, wine and oil, plenteously, with citrons, oranges, plums, pears, and chesnuts. The north part of the island is mountainous, and a chain of mountains runs along the eastern coast. Sardinia produces cattle, buffaloes, foxes, deer, and other game. The only venomous animal is the *maffrone*, a species of spider resembling a frog.

The minerals are gold, silver, lead, iron, alum, and sulphur.

The islands around Sardinia, are Tara and Serpentara, on the S. St. Pietro, St. Antiocho and Vacca on the S. W. Asianara, Rossa, Magdalena, and Tazzo, on the N. and Tavolara, Posata, and Ogliastro on the E. Asinaria, the largest, is 28 miles in circumference.

MALTA.

Malta, the *Iberia*, *Ogygia*, and *Melite* of the Greeks, from which last the Saracens formed Malta, is an island in the Mediterranean, 50 miles S. from the coast of Sicily. The island is a rock of fine free stone, of an oval figure, 20 miles by 12, and 60 in compass, and contains 134 square miles. It has been successively subject to the Phœaciens, Phenicians, Greeks, Carthaginians, Romans, Goths, Saracens, Normans, Knights of Malta, and English. These knights were hospitalers of St. John, in Jerusalem, in the middle of the 11th century. They assisted Godfrey in his crusades, and maintained themselves in the Holy Land, till 1191, when they retired to Cyprus, and then to Rhodes, which they defended for two centuries, and were called Knights of Rhodes. Thence they withdrew to Candia, and thence to Italy, where they remained till Charles V. gave them Malta.

The religion is the Catholic. The island is now a colony of England. The population of Malta, as given by Hassel, is 74,705; of Gozzo, a neighboring island, 12,464; and of Comino, 603. Total, 87,772. The three islands contain 8 cities, 6 towns, 33 villages, and 10,966 houses. There are on these islands numerous country seats.

Valette, the capital, is surrounded with a strong wall. It stands upon a very large, safe, and commodious harbor, having several bays, and defended by Fort Ricasoli, and the celebrated castle of St. Elmo. This last stands on the point of a peninsula, separating the harbor of Valette from another on the right, and commands them both. It contains several churches and convents, a large hospital, and, in 1798, 23,680 inhabitants. The palace and St. John's church would ornament any city in Europe.

Civita Vecchia, the only other town of any size, stands on a hill in the middle of the island, and is strongly fortified. It is a bishop's see, contains several churches and convents, and 5000 inhabitants. Every village has an elegant church, adorned with statues, tapestry, and plate. The soil is only about 8 or 10 inches deep, and lies on the rock. The industry of the Maltese is inconceivable. Much of the soil was brought from Sicily in boats. Every inch of ground is improved, and the crops of cotton, indigo, grapes, olives, figs, lemons, oranges, and other fruit, pulse, roots, herbs, and culinary vegetables of every kind, are abundant. About half of the corn is raised which is necessary for the support of the inhabitants. Wine is also imported. Here is plenty of pasture. Cotton is the staple. The sugar cane is cultivated. The oranges are among the finest in the world. Many of them are red. The heat is excessive, and the inhabitants are much incommoded by gnats. One side of the island is of a great height, and perpendicular. The fortifications of the other sides are a most stupendous work. The ditches, of a vast size, are all cut out of the solid rock, and extend many miles in length.

Gozza lies to the N. W. of Malta, contains 40 square miles, several good harbors, and strong forts, and is fruitful. Comingo lies between them, has a fort, and covers 3 square miles.

IONIAN REPUBLIC.

This little cluster of islands received this name from the French government. It is sometimes called the *Republic of the Seven Islands*, and sometimes the *Ionian Islands*. They have been captured the present year, 1811, by the British, having till then enjoyed a nominal independence, under the protection of France, to which they were ceded by Russia in 1807. Russia took them from France in 1799, and France from Venice in 1797. Venice had then had possession of them from the year 1224, except that the Turks took them in 1479, and kept them 20 years. These islands lie in the Ionian Sea, S. E. of the Straits of Otranto, and near the coast of Turkey. Their number is very great, but seven more particularly deserve our notice. These are arranged in the following table, geographically, beginning with that farthest north.

Names.	Ancient Names.	Sq. Miles.	Population.	Towns.
Corfu	Corcyra	219	65,000	Corfu
Paxo	Paxos	34	6,000	
Sta Maura	Leucadia	110	16,000	Amaxichi
Cephalonia	Cephalonia	350	55,000	Argostoli
Theaki	Ithaca	66	7,000	Theaki
Zante	Zacynthus	88	30,000	Zante
Cerigo*	Cythera	98	8,000	Cerigo.
		965	187,000	

The climate of these islands is warm, but healthy; the land generally fertile and productive. The trees blossom in the winter, and bear fruit in April and November. The last are the smallest. Corn is sown in the winter and reaped in June. Oranges, citrons, the most delicious grapes, olives, fgs, melons, peaches, honey, wax, and oil, are very abundant. The chief exports are oil, muscadine wine, currants, and salt.

Corfu, the largest town in these islands, is fortified and defended by two forts, contains 12,000 inhabitants, several Greek and Roman churches and convents, has a good harbor, and carries on a considerable trade. Zante is situated on the east coast of the island Zante, and contains 12,000 inhabitants. Argostoli, in Cephalonia, has a large, but insecure harbor, and contains 6000 inhabitants. Amaxichi, in Sta Maura, has an equal population. Lixuri, in Cephalonia, has 5000. The religions of these islands are the Greek and Roman Catholic. The first is far the most predominant, and alone prevails in Cerigo. In Zante the Greeks have 40

* Cerigo lies directly S. of the Morea, at a small distance from its coast.

churches, numerous convents, and a bishop ; the Catholics 3 convents and a bishop. In Corfu, the Greeks have numerous churches and convents, and an archbishop. Their clergy are proverbial for their ignorance. The inhabitants of Cerigo are chiefly pirates.

TURKISH EMPIRE.

THE Turkish Empire is central to the Eastern Continent, embracing a portion of Europe, Asia, and Africa ; and having been the scene of most of the transactions recorded in the Bible, is doubtless the most interesting portion of the world. Its divisions, according to Hassel, follow.

	Square Miles.	Inhabitants.
I. IN EUROPE,	217,758	9,882,000
1, Moldavia	19,178	420,500
2, Bessarabia, or Bud- ziac Tartary	8,923	200,000
3, Wallachia	24,658	950,000
4, Servia	20,165	960,000
5, Bosnia	16,000	850,000
1, Bosnia Proper	9,863	
2, Herzegovina, or Dalmatia	4,383	
3, Bielogrod	1,754	
6, Bulgaria	38,137	1,800,000
7, Rumelia, or Romania	35,990	2,200,000
8, Albania	48,526	1,920,000
1, Macedonia	15,780	700,000
2, Albania Proper	15,210	207,000
3, Janna, or Thessaly	3,618	300,000
4, Livadia	6,028	249,000
5, Morea	7,890	464,000
9, Province of the Cap- tain Pacha	1,863	240,000
1, Province of Gallipoli	833	100,000
2, Negropont	482	40,000
3, Tino	66	24,800
4, Santorini		[40,000 to 45,000. <i>Langdon.</i>
5, Andros		12,000
6, Naxia		[80,000. <i>Langdon.</i>
7, Lemnos		12,000
8, Thermia		8,000
9, Siphnos		8,000
		6,000
		[3000. <i>Langdon.</i>
		5,000

TURKEY IN EUROPE.

		Square Miles.	Inhabitants.
10, Nio, or Dios			3,700
10, Candia, or Crete	4,318		281,000
II. IN ASIA,	531,775*		11,090,000
1. Anatolia, or Asia Minor	279,213		6,000,000
2, Scham, or Syria	50,105		1,500,000
3, Algezira, or the upper part of Mesopotamia	37,808		800,000
4, Satabago, or Caucasus	28,100		300,000
5, Irak Arabi, or the lower part of Mesopotamia, and the country around the Persian Gulf	69,040		1,040,000
6, Curdistan	32,572		500,000
7, Armenia	34,937		950,000
III. IN AFRICA.	192,770		3,500,000
Egypt			
1, Zaid, or Upper Egypt	15,780		
2, Vostani, or Middle Egypt			
3, Bahira, or Lower Egypt			

TURKEY IN EUROPE.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, BOUNDARIES, ORIGINAL POPULATION, HISTORICAL EPOCHS, ANTIQUITIES, RELIGION, GOVERNMENT, POPULATION, ARMY, NAVY, REVENUE, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, CITIES AND TOWNS, TRAVELLING, MANUFACTURES AND COMMERCE.

Names.] THIS country had anciently no one name, which comprehended the whole of it, but was composed of many distinct countries, inhabited by different nations. Moldavia and Wallachia were a part of *Dacia*, and Bessarabia of *Sarmatia*. Servia and Bulgaria were *Maesia Superior* and *Inferior*. Bosnia belonged to

* The correctness of the number of square miles in the Turkish dominions, in Asia and Africa is doubted.

Ilyricum; *Ramelia*, or *Romania*, constituted *Thracia*; and the province of *Albania*, the whole of ancient *Graecia*. Of the subdivisions of *Albania*, *Macedonia* retains its ancient name; *Albania Proper*, is *Epirus*; *Janna*, *Thessalia*; *Livadia*, *Graecia Propria*; and the *Morea*, *Peloponnesus*. On the separation of the Roman Empire into Eastern and Western, Turkey became an important part of the Eastern; but it did not assume its present name, till some time after the capture of Constantinople, by the Turks, in 1453. The empire is often called the Ottoman Empire; and the Turkish, less frequently, Ottomans, after their Caliph Othman, who reigned in the beginning of the 14th century.

Extent.] The length of Turkey, from Cape Matapan to the northern limit of Moldavia, is about 870 miles. The greatest breadth, from the western boundary of Bosnia, to the Black Sea, is about 600. The extent of continental Turkey is stated in the table, taken from Hassel, at 212,410 square miles; while the European Turkish islands are estimated at 5348.

Boundaries.] Bounded N. by Austria and Russia; E. by Russia, the Black Sea, the Straits of Constantinople, the Sea of Marmora, the Dardanelles, and the Archipelago; S. by the Mediterranean; W. by the same, the Adriatic, Venetian Dalmatia, and a part of Austrian Croatia.

Original Population.] Herodotus speaks of the inhabitants of all the northern provinces, under the general name of *Scythians*, now generally supposed to be the same with the Goths. These were the successors of the *Celtae*, and their descendants now constitute the chief population of Europe. The earliest Greeks were called *Iones*, and are generally considered of Scythian origin. The *Sauromatae*, or *Slavi*, at length encroached upon the Scythians, from the north, and the greater part of the present inhabitants of Moldavia, Wallachia, Servia, Bosnia, and Bulgaria, are supposed to be their descendants. Many of the Wallachians also are thought to be descended from the Roman colonists in Dacia. The present ruling nation, the Turks, are more recently from Asia. This name is given by the eastern historians to the numerous tribes, which, in Europe, are called Tartars. The ancient Huns are a kindred race with the Turks. The date of their first empire in Asia, is the year 1200 before Christ. It included the whole of Asiatic Tartary, and was at length dissolved by the dissensions of the reigning family, and the victories of the Chinese. The dispersed Huns emigrated to different countries. Part of them invaded Europe, in the reign of the emperor Valens, and founded an empire, which lasted till A. D. 468. The Turks, a branch of this ancient nation, were first heard of among the Altaian mountains, where, for 450 years, they were subject to the Georgian Tartars. In A. D. 552 they revolted, and wrested the empire from their master.

The Turkish empire thus established, extended over the whole of Tartary. Its western limit was the Palus Maeotis. Its duration was 211 years. The immediate ancestors of the European Turks, lived originally in the neighborhood of Mount Caucasus.

Leaving their ancient habitations, and passing the Caspian Straits, they settled in Armenia about the year 844. There they continued, an unknown, despicable nation, till the civil wars of the Saracens raised them into notice. In 1289 they first invaded Europe. In 1453 they took Constantinople, and soon after possessed themselves of the whole of European Turkey.

Historical Epochs.] So many ancient states are comprised within the limits of Turkey, that it would be useless to recite the various epochs of their history. This article will therefore be confined to those of the principal nation.

1. The establishment of an extensive empire in central Asia, A. D. 552, among the Altaian mountains, and its subsequent dissolution, followed by the dispersion of the Turks, about the year 763.

2. The emigration of the Turks into Armenia, in the year 844.

3. Mohammed, Sultan of Persia, calls to his assistance Tangrolipix, and 3000 Turks, who enabled him to overcome the Sultan of Babylon, A. D. 1030. After this victory, Mohammed, refusing to let the Turks return, Tangrolipix fought with the Persians, and soon made himself master of Persia and Babylon. The year 1041 was the commencement of their attacks on the eastern Roman Empire.

4. Their permanent settlement in Europe, in 1357, after the whole of Asia Minor had been subdued. In three years they took Adrianople.

5. The capture of Constantinople, and the complete subversion of the Roman Empire, in 1453. Athens and Corinth were taken in 1458, and the whole of the Morea by the end of the following year. Albania submitted in 1467.

6. The conquest of Egypt, in 1517, and that of Hungary, in 1540. Before this, however, the northern provinces had all been subdued.

7. The destruction of the Turkish maritime power, in 1571, by the Venetians, at the battle of Lepanto.

8. The loss of Hungary, Transylvania, Moldavia, and Wallachia, in 1594.

9. The peace of Carlowitz, in 1698, by which the Morea was given to Venice, Transylvania finally ceded to Austria, and Azof to Russia.

10. The late wars with Russia. By that of 1769, the boundary of the two empires was transferred from the Bog to the Dnieper, and the Crimea finally lost. The Russians have since taken the whole of the country between the Dnieper and the Dniester, while Moldavia, Wallachia, and Bessarabia have, within the last two years, been occupied by Russian armies, and the seat of war is transferred across the Danube.

Antiquities.] These are more numerous, and more interesting in Turkey, than in any other country in Europe. They consist principally of the remains of Grecian refinement, the ruins of ancient temples, aqueducts, theatres, columns, and arches; the bare enumeration of which would carry us beyond our limits. The

cathedral of Sancta Sophia, a venerable monument of antiquity, is still standing within the city of Constantinople. It was built by Justinian, in the 6th century, and serves the Turks as a model of architecture. All their principal mosques are built in close imitation of it.

Religion.] The Mahometan is the established religion of Turkey ; but at least two thirds of the inhabitants are Greek Christians. The Mahometans divide their religion into two general parts, faith and practice. The articles of faith are the existence and unity of God ; the existence of angels, devils, and good and evil genii ; the inspiration of the pentateuch, the Psalms, the Gospel, and the Koran ; the mission of the prophets, six of whom, Adam, Noah, Abraham, Moses, Jesus, and Mahomet, brought new dispensations, which successively abrogated the preceding ; a general resurrection, with a consequent judgment and retribution ; and the absolute predestination both of good and evil. The articles of practice are circumcision ; prayer, at 5 stated seasons of the day, with the face turned towards Mecca ; alms, legal and voluntary ; ablutions, fasting throughout the month Ramadan ; a pilgrimage to the temple of Mecca. The Mahometan religion prohibits the use of wine, the flesh of hogs, and the blood of animals ; also the slaughter of dogs and other domestic animals, except such as are fit for food. Private revenge is tolerated by the express declaration, and by the example of Mahomet. Polygamy and divorce are both authorized by the precepts of the Koran.

The *Mufti*, or *Sheik-Islam*, is the head of the Mahometan religion. He is appointed and may be deposed by the Sultan, and is the second subject in the empire. He is chosen from those who have been *Radislekers*, or military judges for Europe. He resides at Constantinople, and is the head of the *Ulema*, a body highly respected and powerful, the guardians of the religion and interpreters of the laws. These possess the most lucrative employments, are secure from the extortions of office, and cannot be put to death without the consent of the Mufti : while their property, at their decease, passes as a right to their heirs. The three classes of the *Ulema* are the *muftis*, or doctors of the law ; the *cadis*, or ministers of justice ; and the *imams*, or ministers of religion. In the larger mosques there are preachers ; readers, who recite the prayers ; persons who summon the people together, and sextons. In small parishes, the imam performs all these duties, and is sometimes the village schoolmaster.

The Dervises are an entirely distinct order from the imams, or priests. There are two classes of them. The *Mevelavis*, or followers of one *Mevlava*, live in convents, and are very numerous. Their chief monastery is near Cogna, in Anatolia, where the chief of the order resides, and where its assemblies are held. All the others are dependant on this. They affect great modesty, patience, humility, and chastity ; go bare-legged and open-breasted ; submit to frequent penances, and fast every Wednesday. Their chief religious solemnity is turning violently round to the sound of a flute, till they become delirious. They leave their convents

when they please, and then are at liberty to marry. The *Bekta-chis* have no fixed habitations, but stroll about the country. They are generally mountebanks, and lay claim to skill in magic, sorcery, and a knowledge of future events. Some attach themselves to the pashas, others to the companies of janizaries.

The Patriarch of Constantinople is the head of the Greek church, enjoys an ample revenue, and claims precedence of the patriarchs of Antioch, Jerusalem, and Alexandria. He is chosen by the archbishops. The office is uniformly set to sale, and bestowed on the highest bidder. The inferior clergy are bishops, archimandrites, abbots, arch-priests, priests, and deacons. The Greeks have few nunneries, but numerous convents.

Government.] Mahomet himself, like Moses and Joshua, sustained the double character of a military chief and an inspired legislator. His orders and regulations were professedly the dictates of inspiration. His successors, the Saracen califs, claimed a high sanctity of character, as descendants of the Prophet, and as guardians and expositors of the law. The Ottoman emperors, at the suppression of the califat, separated the temporal and spiritual authorities. Eager for military glory, they resigned into the hands of the theological lawyers the spiritual supremacy. The power of this body of men was scarcely perceptible under the warlike monarchs; but since the decline of the military spirit of the Sultans, it has been great and formidable, often in direct opposition to the will of the sovereign, always in balance against it. This, with the mutinies of the janizaries, and the insurrections of the provincial pachas, is the only barrier against despotic power.

The empire is governed by a code of laws, called *multeka*, founded on the precepts of the Koran, the oral laws, usages and opinions of the Prophet, and the sentences and decisions of the early califs and doctors. This code regulates alike religious, civil, criminal, political and military affairs. On matters unprovided for, the Sultan pronounces as the good of the state demands. The Sultan is the sole fountain of honor and of office, and claims to be the proprietor of all the immoveable wealth of the empire. He has the absolute power of life and death, and exercises it over his ministers and governors, with military severity and promptitude. The eldest surviving male of the imperial family is always the heir to the crown. The succession is limited to the family of the Othmanide, or descendants of Osman; and in case of failure, to the late sovereign family of Crim Tartary, which is descended from Jenghis Khan. The presumptive heirs of the crown are kept in honorable confinement, in a state of the most deplorable ignorance, devoted only to sensual gratifications.

The Sultan usually has little to do with the administration of the governments. His substitute, the Grand Vizir, or *Vizir azem*, has, under the Grand Seignor, absolute authority. In time of peace, he regulates the internal affairs of the country; in time of war he commands the armies, and a lieutenant is appointed for the home administration. He is president of the Divan, or supreme council, composed of the *mufti*; the *kiaya-bey*, or lieuten-

ant of the vizir ; the *reis-effendi*, or chancellor of the empire, and minister for foreign affairs ; the *tapterdar effendi*, or minister of the finances ; the *tchélé-bi effendi*, or receiver of the tax on merchandise ; the *tersaná-emini*, or minister of the marine ; the *chi-aoux-bachi*, or secretary of state ; two *ex-rris-effendi*, and two *extapterdar-effendi*. The captain-pacha, or high admiral, and the *kiaya* of the sultana-mother, are called to the extraordinary sittings of the divan. The other officers are the two *radileskers*, or supreme military judges for Europe and Asia ; the *istambol-effendi*, or judge of Constantinople ; the *moulahs*, or judges of the large towns ; the *cadis*, or judges of the small towns, and their substitutes, the *naibs*.

The governors of the provinces are styled *pachas*. The Pachas with three tails possess absolute power, subordinate only to that of the Sultan, and command the troops of their provinces. Those of Romelia, Anatolia, and Damascus, have the title of *beylerbeyis*.

Population.] Pinkerton calculates the population of Turkey in Europe at 8,000,000 ; while Hassel's estimate is 9,822,000. This last is derived chiefly from Beaufort, Pougneville, and Olivier.

Army.] The Political Journal for 1804, quoted by Hassel, gives the following estimate of the Turkish forces.

1. <i>Infantry.</i>		
Janizaries	40,000	
Artillery	20,000	
Provincial do.	80,000	
Frontier troops	50,000—190,000	
2. <i>Cavalry.</i>		
Spahis	20,000	
Provincial cavalry	75,000	
Frontier do.	12,000—107,000	
		Total,
		297,000

The Janizaries are a corps of infantry instituted by Amurat I. At first they were prisoners and christians ; now they are only mussulmans. They are scattered and organized in all the towns. The Spahis are a more ancient corps, and constituted at first the chief strength of the Ottoman armies. The Turks at present are indifferent soldiers. They have little skill, discipline, or subordination.

Navy.] The navy, in 1806, comprised 20 ships of the line, 15 frigates, and 32 smaller vessels, carrying 2156 guns, and 4000 marines. Formerly the gallies of Tripoli, Tunis, and Algiers, would have been added to this list ; but over these the Grand Seignor has now no control.

Revenue.] The Turkish revenue is divided into two parts, the *Miri* and the *Hasnè*. The *miri*, or public revenue, is raised from a land-tax, a tax on moveables, tolls, poll-tax, monopolies, the mines, the mint, a tribute from the waiwodes of Moldavia and Waliachia, and a provincial tax. Hassel estimates the amount of it at

30,000,000 guilders, or 15,555,000 dollars. The *hasnē*, or revenue of the Sultan, arises from the royal domains, escheats, presents, and extortions from the rich christians, and from public officers. It is impossible to ascertain its exact amount ; but it is known greatly to exceed the *miri*. The expenses of the seraglio fall far short of its amount ; and the excess is religiously preserved by the Sultans. The quantity of treasure thus accumulated is supposed to be very great.

The national debt, in 1803, is stated by the same author, at 106,700,000 guilders, and the debts then due the government, at 17,066,480 piasters, or about 15,300,000 dollars.

The revenue system in Turkey is bad in all its parts. It is a monopoly in the hands of the rich, to whose benefit the produce of all the taxation is appropriated. The destruction of commerce and manufactures, consequent upon this, has reduced the Turkish subjects to poverty.*

Manners and Customs.] The Turkish houses are generally of wood. The wall is generally covered with painted planks and rather ill joined. The roofs, in most parts of the empire, are flat, and covered with hollow tiles. In most houses there are no chimnies, except in the kitchen. The apartments of the women are separate from the rest of the house, and are never entered by any male, except the master of the family. Every room in a Turkish house serves for every purpose, and the furniture in each differs only in its quality. The sopha extends round three sides of the chamber, on a frame raised a few inches from the floor. On these are placed mattresses covered with wool, and sometimes with cotton. These are the only beds ; and the bed furniture consists merely of a quilted coverlet, a sheet and a pillow. The floor, in winter, is covered with a rich carpet ; in summer, with Egyptian matting. The dinner is served on a large circular tray, of tinned copper, placed on a low stool, at a corner of the sofa ; the children sitting on cushions spread upon the floor. The dishes are brought singly, and succeed each other very rapidly. A long napkin is spread over the knees, instead of a table-cloth. The fingers perform their original office, and wholly supersede the use of knives and forks ; even plates are considered as prohibited. The turban of the men is of white muslin, and is heavy, thick, and unhealthy. The women instead of it, wear a bonnet, like an inverted basket, formed of pasteboard, and covered with cloth of gold. In other respects the dress of both sexes is nearly similar. The shirt is of calico. The robe is of fine broadcloth, and generally embroidered. A muslin or silk sash is always worn round the waist. The breeches are large and full, fastened at the knee, and hanging down in a fold nearly to the middle of the leg. The shoes are slight and unfit for service. Marriage in Turkey is merely a civil contract. The parties rarely see each other before its celebration. Every mussulman is permitted by law to have four wives, and as many concubines as he pleases. Divorces sel-

* Langdon.

dom occur, except for sterility ; adultery being usually followed by the death of both offenders, inflicted by the husband. The concubines are usually slaves, purchased in the market. The morals of the Turks are loose in the extreme, and lewdness, in its worst forms, is common throughout Turkey. Both sexes are distinguished for cleanliness, and bathing is one of their stated amusements. The public baths are elegant and noble. The Turks are fond of conversation, story-telling, dramatic exhibitions, dancing and gladiatorial shows. Most of their time, however, is spent in smoking and chewing opium, and in the indulgence of the reverie which they occasion. The miserable tenants of the haram resort also to these, as amusements, when tired of their embroidery, their singing, dancing, and music. Games of chance are forbidden by the Koran, but chess and draughts are universally played. The period of mourning is very short, and the corpse is buried on the day of decease. The burying grounds are without the cities, usually by the road side. Slabs of marble, or coarse stone, are placed at the extremities of the grave, with an inscription and a turban, carved in stone, on the tombs of the males. Over every new grave a cypress is planted.

The Turks have confidence in amulets and charms, and are superstitious observers of omens and dreams, though they are not countenanced in these delusions by the Koran. They believe it unlawful to paint or carve any parts of the human body, except the hands and feet of Mahomet, and they firmly believe that angels can enter no house where there are pictures of men. Painting and sculpture are of course in a great measure neglected. The mussulmans are courteous and humane in their conduct to each other, but they refuse to unbelievers the salutation of peace. The external modes of good breeding among the Turks differ entirely from those established in the other countries of Europe. The uncovering of the head, with us an act of reverence, is not only ridiculed by them, but considered as indecent and improper. Their usual form of salutation is natural and graceful. In greeting an equal, they put the hand on the heart ; in addressing a superior, they apply the right hand first to the mouth, and then to the forehead. In many respects the Turkish customs are a striking contrast to our own. Their robes are large and loose, entirely concealing the form of the body. They reverence the beard, and permit it to grow to an extravagant length. In performing their devotions, or on entering a dwelling, they take off their shoes. In inviting a person to approach them, they use what with us is considered as a repulsive motion of the hand. In writing, they trace their lines from right to left. The master of a house does the honors of his table by serving himself first from the dish ; he drinks without noticing the company, and they wish him health when he has finished his draught. They lie down in their clothes. The Turks exhibit but few marks of taste in their buildings. Their cities are not adorned with public monuments. Their temples, baths, fountains, sepulchral monuments, and other works

connected with their religion, are their only ornamented structures. Upon bridges and aqueducts they bestow no ornament.

The Greeks are gay, witty, and cunning. Those on the coast carry on almost all the navigation of the empire. Those in the interior pursue agriculture with a degree of spirit and intelligence. The rich are well informed, supple and intriguing. They are generally superstitious, timid, and exact observers of holidays. Their priests are numerous. The superior clergy are well educated and rich ; the inferior are poor and ignorant.

The Armenians are all tradesmen, and are the most intelligent of the profession in Turkey. They travel into the interior of Asia and India, and are patient, economical, and indefatigable. They are at the same time ignorant and superstitious.

Language.] The Turkish language originally was far from being copious, and a great proportion of its words is derived from other oriental dialects. The arrangement of the words is remarkably inverted. Their expression is soft and musical, and the language is well fitted for colloquial purposes ; but it is not characterized by elegance or force. It is defective in terms of art, and expresses philosophical ideas imperfectly. The characters are fundamentally the same with the Arabic and Persic. They are 28 in number ; but the number of distinct sounds is 36. A distinguished critic, comparing the three western languages of Asia, speaks of the Persian as excelling in sweetness and melody ; the Arabic in copiousness and strength, and the Turkish in gravity and dignity. The first is the language of love, the second of eloquence and heroism, the last of narration and instruction.

Literature.] The Turkish poetry is entirely oriental in its character, and has the same boldness of personification, the same extravagance of hyperbole, the same minuteness of allegory, and generally the same luxuriance of imagery, with the Arabic and the Persian. The Turks have many historians, but the ignorance they discover of geography and chronology, renders their works of little value. Astrology is still cultivated with the utmost assiduity. The chief of the astrologers is an officer of the seraglio, and is consulted on every subject which relates to the health or safety of the Sultan ; and it is even considered essential to the public warfare that he should determine the precise instant when any important public business is to be undertaken, such as the march of an army, the sailing of a fleet, the launching of a ship of war, and especially the appointment of a grand vizir.

The mode of education among the Turks is completely in the ancient style. They study the logic, philosophy, and metaphysics of the dark ages. They are ignorant of the modern improvements in chemistry, agriculture, and natural philosophy. The telescope, microscope, and electrical machine are unknown, as to their real uses, and even the compass is not universally employed. They have no principles or theory, and their practice is a servile imitation. Their knowledge of geography is limited to their empire. Men in high office are frequently ignorant of the

relative situation of their neighbors. In astronomy, they barely know how to calculate eclipses, with a moderate degree of accuracy. Medicine is still considered as a species of sorcery. Their surgery is rude from want of science, of skill, and of instruments. In the management of their small coasting vessels, they are by no means inexpert. This however is done chiefly by the Greeks. They have no idea of physics or natural history. Few of the Turks can read or write. Those who study, apply themselves chiefly to poetry, and the Arabic and Persian languages, while the doctors of the law are well read in the Koran, and the imperial constitutions. They reckon time by lunar revolutions, and the hours of prayer are regulated by the rising and setting of the sun. The civil day begins at sunset. Sculpture in wood and in stucco, and the engraving of inscriptions on monuments and seals, are performed with neatness and precision. Their paintings have little merit in design or execution.

Cities and Towns.] Constantinople, called by the Turks *Stambol*, or *Istambol*, was built on the ruins of the ancient *Byzantium*, by Constantine the Great. Eusebius says this latter city was founded in the third year of the 30th Olympiad, during the reign of Tullus Hostilius; while Diodorus Siculus asserts that its foundations were laid by one *Byzas*, about 1263 years before Christ. In 330, it received its present name from Constantine, who, at the same time, made it the seat of the Roman empire, and in 1453 was taken by the Turks, under Mahomet II. after a siege of 53 days. It stands at the mouth of the Thracian Bosphorus. The Sea of Marmora lies on the S. W. the Bosphorus on the S. E. the Harbor, anciently the Gulf of Ceras, on the E. and a wall separating it from the adjoining country on the N. W. The southeastern side is so short as scarcely to prevent the town-plat from presenting the appearance of a triangle. The houses rise gradually from the shore, like the seats of an amphitheatre. Most of them are meanly built of earth and wood, and none exceed two stories in height. The streets are long, narrow, dirty, and badly paved. Many of the public buildings, as the palaces, the mosques, bagnios, bazars, and caravanseras, are magnificent. The seraglio occupies the S. E. part of the city, and is supposed to cover the whole of the site of the ancient *Byzantium*, and to contain 10,000 inhabitants. A wall, 36 feet high, separates it from the rest of the city, with which it has communication by 9 gates. It is above 6 miles in circumference, including the gardens, and is an assemblage of palaces and apartments, placed by the side of each other, without symmetry or order. The *Harem* is that part of the seraglio appropriated to the females of the imperial family. The Mosque of St. Sophia fronts the great gate of the seraglio, and, in some respects, exceeds the church of St. Peter, at Rome, in grandeur and in beauty of architecture. This and the six other imperial mosques have religious, literary and charitable foundations annexed to them. The Greeks have 22 churches, besides the patriarchal church; the Armenians have an archbishop and 3 churches; the Roman Catholics have 6 convents, and the Jews

several synagogues. There is also a Swedish Lutheran church. There are in Constantinople 518 seminaries of learning, 1250 schools, and 35 public libraries, some of which contain 15,000 volumes. Hassel states the number of houses to be 88,185 ; and, following Eaton, estimates the number of inhabitants at 300,000. Olivier says the population exceeds 500,000. Probably the calculation of Dalloway is more correct than these. He says that there are 200,000 Turks, 100,000 Greeks, and 100,000 Jews, Armenians, and Europeans. The city has suffered often and severely by the plague and by fires. The trade of the city is chiefly in the hands of the Jews, Armenians, and Greeks ; and the navigation is carried on by Europeans, who are all confounded under the general name of Franks. Besides silk, cotton, wool, flax, drugs, coffee, sugar, wax, honey, fruits, hides, and tobacco, Constantinople exports its own printed muslins, the satins, silk stuffs and velvets of Brusa and Aleppo, the serges and camelots of Angora, the crapes and gauzes of Salonica, the sword-blades of Damascus, and the carpets of Smyrna. The harbor is capable of holding 1200 ships. Its length is upwards of $3\frac{1}{2}$ miles ; its breadth varies from 2000 to 3000 feet ; and its depth is every where sufficient for the largest ships. On the east side of the mouth of the harbor is Galita, a suburb, inhabited by merchants ; and east of this lies Pera, where the foreign ambassadors reside. Scutari is another very large suburb, opposite the seraglio, on the coast of Asia.

Philippi, or Philippopolis, on the river Maritz, was founded by Philip of Macedon. This city is famous for two battles fought in its neighborhood, between Augustus and Brutus. To the inhabitants of this city, and of Philippi, St. Paul addressed one of his epistles. The town is meanly built, without fortifications, or one good street ; the situation being so low and moist that the mud is sometimes two feet deep, and stones, like posts, are set up to facilitate the progress of foot passengers. The number of houses in 1790 was, according to Hassel, 26,000 ; and the number of inhabitants 120,000. Lat. 42 22, N.

Adrianople, called *Edrene* by the Turks, stands also on the Maritz, at the confluence of the Tunsia and the Harda, and rises gently on the side of a small hill. It is of a circular form, and is surrounded by decayed walls and towers, which do not deserve the name of a fortification. Some of the houses are of brick ; generally they are of mud and clay. The streets are dirty and narrow. The bazar, or market-place, is an arched building, about half a mile long, with six gates, and a great number of shops. There are four mosques. The imperial seraglio stands upon a plain, near the Tunsia. The number of inhabitants is about 100,000, and the commerce is very extensive. It is the see of the Greek archbishop, and often the residence of the Grand Signior during the plague. N. lat. 41 41, E. lon. 26 27.

Saloniki, at first called *Therma*, and afterwards *Thessalonica*, by Cassander, son-in-law of Philip of Macedon, stands at the head of an extensive gulf, called the Gulf of Salonica, in Macedonia, in

the N. W. corner of the Archipelago. Here are churches, pillars, and triumphal arches, and many other splendid remains of ancient architecture. St. Paul addressed two of his epistles to the ancient Thessalonians. The number of inhabitants is 62,000. This town has always been distinguished for its commerce.

Serai, Serajo, or Bosna; Serajo, the capital of Bosnia, is built on the river Bosna, a tributary of the Save. It is large, rich, and commercial, and contains 12,000 houses, and 48,000 inhabitants.

Sophia, the capital of Bulgaria, was built by the emperor Justinian, on the ruins of the ancient Sardica. It is the see of a Greek archbishop. The town is commercial, and well built, but without walls, and the streets are narrow, uneven, and dirty. Houses 8000; inhabitants 46,000.

Bucharest, the capital of Wallachia, stands upon the Dembrovitz, a tributary of the Danube. The streets are paved transversely, with planks of wood, badly fastened, and much decayed. Here is a singular number of churches and convents. Population, 42,000.

Belgrade, Alba Graecorum, the capital of Servia, stands on a side hill, at the conflux of the Save with the Danube. The suburbs are extensive, and it is a great resort of merchants from many different nations. The chief trading streets are covered with wood, as a shelter from the rain and sun. The Armenians and Jews are employed as factors. The adjoining country affords fine timber for ship-building. Population 30,000. The fortifications of Belgrade, formerly very strong, were demolished in 1739.

Janna, or Yanina, in Thessaly, is situated on a lake which communicates with the river Peneus. It is a considerable town, and the see of a Greek bishop. Population 30,000.

Ibrail, in Wallachia, stands upon the Danube, a little above the mouth of the Sereth, and contains 30,000 inhabitants.

Seres, or Serrae, in Macedonia, 36 miles E. N. E. of Salonica, is the see of a Greek archbishop, and contains 30,000 inhabitants.

Sistove, in Bulgaria, on the Danube, contains 4000 houses and 21,000 inhabitants.

Widdin, also in Bulgaria, is the see of a Greek archbishop, and contains 20,000 inhabitants.

Larissa, in Thessaly, a city of very remote antiquity, stands upon the river Peneus, at no great distance from the celebrated Olympus. Its present population is 20,000.

Scutari, or Iscodar, in Albania, stands on a small lake, which is conducted to the Adriatic. It is the residence of a Greek archbishop, and contains 20,000 inhabitants.

Nicopoli, in Bulgaria, on the Danube, is the see of a Greek bishop, and contains a population of 20,000.

Bender, in Bessarabia, on the Dniester, is the celebrated retreat of Charles XII. of Sweden, when he put himself under the protection of the Turks. Population 20,000.

Akerman, in Bessarabia, at the mouth of the Dniester, has an equal population.

Choctim, or Choczim, in Moldavia, on the Dniester, at the nor-

thern extremity of the empire, is noted for two victories gained by the Poles over the Turks, in the 17th century. Population, 20,000.

Of the remaining towns, little more can be mentioned than their names and population. In Wallachia, Giurgevo, or Georgetown, contains 18,000; in Rumelia, Gallipoli, 17,000, and Trajanople 15,000; in Macedonia, Achrida, 16,000, and Vodina, 12,000; in Bosnia, Banjaluka, 15,000, Mostar, 18,000, Trawnik, 12,000, and Zvornik, 14,000; in Moldavia, Jassy, 15,000; in Bessarabia, Ismail, 10,000; in the Morea, Tripolizza, 12,000; in Albania, Paramithia, 15,000; in Bulgaria, Ruschiuk, 30,000, Schumla, 12,000; and Warna, 16,000; and in Servia, Semendria, 10,000.

Athinia, or Setines, the ancient *Athenae*, is the see of a Greek archbishop, with a revenue of £1,000 sterling, and is inhabited almost exclusively by Greeks. It stands on the N. E. coast of the gulf of Engia, with a safe and large harbor, narrow at the entrance, and commanded by the citadel. Silk, wax, wool, and oil, are the chief exports. The Athnians are still distinguished by the subtlety and acuteness of their understandings, and are more polished in their manners and conversation than their neighbors. The population is 12,000 souls. The houses are mostly mean and straggling, with many large areas, or courts, before them. The Greeks have numerous convents and churches. The monuments of ancient art remaining in this city, are probably unrivalled in their magnificence.

Mistria, the ancient Sparta, stands upon the Eurotas, and is defended by a strong castle.

The Greeks have numerous churches, one called the Perileptos, distinguished for its beauty. The Jews have their synagogue, and the Turks a superb mosque. It is the residence of a Greek archbishop. Population, 12,000.

Ephesus, called by the Turks *Ay as aluke*, was anciently the chief metropolis of Lydian Asia, and the seat of a Roman Proconsul. It is distant from Smyrna to the S. E. about 46 miles, and is situated on a plain south of the river Caystre. The plain is encompassed by a zone of hills, leaving a communication between the city and the sea. Ephesus was once a very considerable and wealthy place, and has been the scene of much robbery and bloodshed. In the 3d century, it was plundered by the Persians, and the Scythians ravaged it sometime afterwards. The temple of Diana was plundered and destroyed by Constantine, in consequence of his edict to destroy all the heathen temples. Its consideration and wealth exposed it to the ravages of the Mahometan princes, and Tamerlane, after the battle of Angora, spent a month in plundering the city and its neighborhood, carrying away its gold, silver, and jewels, and even the clothes of the inhabitants. It continued to be ravaged and destroyed until Mahomet I. obtained possession of it. Since this event, it has been under the quiet dominion of the Turks. It is now known neither as a place for trade, nor as a magnificent city, but is distinguished only by its ruins. The temple, which on account of its magnificence and gigantic

size, was formerly ranked among the wonders of the world, was erected at the expense of several of the wealthiest cities of Asia. Pliny says it was 425 feet long, and 220 feet in breadth. Its vaulted roofs and lofty porticoes, were supported by 127 pillars, each 60 feet high. After this was destroyed by Herostratus, the Ephesians sold the remains, and erected another of superior magnitude and beauty. The stones which composed the building are of immense size, cut out from mountains in the vicinity. The ruins of this magnificent temple are scattered through a considerable extent of country. Five and twenty miserable Turkish hovels constitute the whole of modern Ephesus. Its population is about 300. The country around is fertile and pleasant. Wheat and barley grow here plentifully.

Travelling.] The high roads are rarely travelled by individuals, except on business. The Turkish caravans, both in Europe and Asia are composed of horses and camels; and merchandise is transported by these conveyances from the Hungarian frontiers to the Persian Gulf. Wheel carriages are not unknown, but are little used, from their not being adapted to the nature of the country. The Tartars are public couriers, much respected for their good conduct and fidelity. They are strong and hardy, and perform their journeys with remarkable celerity. As there is no such thing as a general post, a certain number of these Tartars are attached to the court, to the army, and to the governors of provinces, and are occasionally dispatched to all parts of the empire.

Manufactures and Commerce.] The Turkey carpets have long been distinguished for their beauty; as have the printed muslins of Constantinople, and the crapes and gauzes of Salonica. The brass cannon of the Turks are admired, and their musket and pistol barrels, and sword-blades, are held in great estimation by foreigners. Morocco leather is manufactured in large quantities, and of the best quality, in Gallipoli and the Dardanelles. The commerce of Turkey is very far from being in a flourishing state. The oppression of public officers, the venality of tribunals, and the general want of common honesty, inspire an universal distrust, and render commercial risks extremely precarious. The effect of this state of things, is to raise the interest of money, and the price of goods, to an exorbitant height. Commonly money cannot be borrowed, nor goods purchased on credit, without a pledge above their value. The interest of money lent to Europeans is from 8 to 10 per cent.; to Jews, Armenians, and Greeks, from 15 to 20; to private Turks, from 25 to 30; and to Turks who belong to the government, from 40 to 50. Turkey depends upon no foreign country for subsistence. The corn countries, in spite of the impolitic restrictions of the government, besides pouring plenty over the empire, secretly export their superfluities to foreign countries. Their corn, their maize, and their rice, are all of superior quality; their wine and oil, though deprived of half their excellence by the unskilfulness and negligence of preparation, are sufficient, not only for the demands of an extensive home

consumption, but for the supply of several foreign markets. Their wool, camel's hair, goat's hair, cotton, buffaloe's hides and tongues, hares' skins, morocco leather, silk, flax, coffee, sugar, honey, tobacco, wax, box, copper, hart's-horn, furs, horse-hair, nutgalls, currants, figs, saffron, drugs, and Parian marble, are distributed over both continents.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, RIVERS, GULFS, STRAITS, Isthmus, Mountains, Forests, Botany, Zoology, Mineralogy, Natural Curiosities.

Climate and Seasons.] THE climate of Turkey is generally mild, the air pure, and the seasons regular. Indian corn and the vine flourish even in Moldavia and Wallachia; and rice and the olive, together with these, in the more southern régions. The country is rather mountainous. Rumelia, however, is chiefly a plain country, and many plains and vallies are found in the other provinces. The soil is almost universally fertile, yielding vast quantities of excellent grain, particularly wheat, barley, indian corn, and rice. The characteristical indolence of the Turks suffers extensive tracts of fine land to lie in an uncultivated state.

Rivers.] The *Danube* has already been mentioned as in part a Turkish stream. The *Save* also separates Slavonia from Bosnia. The most considerable tributary of the *Danube* from Turkey, is the *Morava*, the ancient *Margus*, which rises from many sources in Mount Hæmus, and, running through Servia, falls into it a little below Semendria, after a course of 200 miles. The *Esker* runs 120 miles, and falls into it above Nicopoli.

The *Maritz*, the ancient *Hebrus*, rises in a more eastern part of the same mountains, near Bagni, and running S. E. and afterwards S. W. falls into the Archipelago, after a course of about 300 miles.

The *Vardari*, formerly the *Axius*, issues from the western part of the same range, called Mount Argentaro, and pursues a south-easterly course of more than 200 miles, to the Gulf of Salonica.

The *Drin* pursues a winding course of about 120 miles, and empties into the Gulf of Drin, in the Adriatic. Another *Drin* of similar size falls into the *Save*, at Ratsha.

Gulfs.] The Gulf of Lepanto, *Sinus Corinthiacus*, sets up eastward, about 120 miles from the Ionian sea, separating the Morea from Livadia. It is every where narrow, though wider near its head, than near its mouth.

The Gulf of Engia, *Sinus Saronicus*, on the opposite side of the isthmus of Corinth, extends from S. E. to N. W. about 60 miles, and is 25 miles wide at the mouth. A little farther south is the Gulf of Napoli, *Sinus Argolicus*, lying in the same direction, and nearly of the same extent.

The Gulf of Salonica, *Sinus Thermaicus*, and *Macedonicus*, is the N. W. termination of the Archipelago. It is about 120 miles long, and 30 wide. *Pelion*, *Ossa*, and *Olympus*, lie near its western coast, and the *Peneus*, the *Haliacinon*, the *Erigon*, the *Axius*, and the *Echidorus*, contribute to its waters.

Straits.] The Dardanelles, and the Straits of Constantinople, have formerly been described. The channel of Negropont separates that island from the coasts of Attica, Boeotia, Phocis, and Thessaly. Its whole length is not less than 130 miles. Its greatest breadth is about 15 miles, while that of the narrowest part, near the town of Negropont, called the Euripus, scarcely exceeds the breadth of a galley.

Isthmus.] The isthmus of Corinth separates the Gulfs of Lepanto and Engia, and connects the Morea with Livadia. This was the scene of the celebrated Isthmian Games, which began B. C. 1326. The length of the isthmus is 25 miles, and its breadth 14 miles.

Mountains.] The chains of mountains are numerous and extensive. To the W. of Moldavia and the Buckovine, runs N. and N. W. for about 200 miles, part of the grand Carpathian chain, anciently called the Bastarnic Alps. The most southern branch of this grand chain, tending S. W. for more than 200 miles, forms the N. and W. boundary of Wallachia.

On the S. of the Danube appears the grand range of the Hæmus, which Ptolemy represents as running from the S. W. to the N. E. while modern observations indicate the opposite direction; but the recent maps of these regions are still very imperfect. However this be, the chain of the Hæmus is deservedly celebrated by the ancients, being of great elevation and extent, as appears from the numerous and large rivers which issue from its sides. This mountainous tract extends more than 400 miles, and is now known under various names, as Emineh, or Hemineh Dag, on the east; Bulkan and Samoco in the middle; Ivan on the west; while the Despoto Dag branches off to the S. E. and may, perhaps, be the Rhodopé of the ancients.

From the western extremity of the Hæmus seem to branch off two other extensive chains; one running N. W. between Dalmatia on the W. and Bosnia and Servia on the E. while the other passing S. forms the mountains of Albania and the W. of Greece. The chain running to the S. has many classical appellations, as the Acroceraunian, Pindus, &c. The E. and S. of Greece are also crowded with small chains of mountains and solitary hills.

There is a range which commences near the Gulf of Volo, *Sinus Pagasatus*, and, after winding to the N. W. runs parallel with the coast of Thessaly, as far as the river Salambria. The southern half is called Mount Pelion, the northern Mount Ossa. The continuation of the chain beyond that river, is the celebrated Olympus, the famed residence of the gods, and the court of Jupiter. Xenagoras, in the 4th century before Christ, measured the highest summit, and found it to be 10 stadia and 1 plethrum, wanting 6 feet, or 6135 English feet in height. Mr. Bernouilli,

by his measurement, finds it to be 6501 feet. Between Ossa and Olympus, winds the valley of Tempe, painted by the poets as the most delightful spot on the earth, and often honored by the presence of the gods. Mount *Othrys*, the residence of the centaurs, was a range in the south of Thessaly; and *Pindus*, the favorite resort of Apollo and the Muses, separated it on the west from Epyrus. *Parnassus* was merely the continuation of the same range, through Etolia and Phocis; while Mount *Helicon* was its southeastern termination, in Boeotia, near the head of the Gulf of Lepanto. Mount *Athos*, or Monte Sancto, is on a peninsula, in Macedonia, having the Gulf of Contessa, or Orfana, on the N. E. and the Gulf of Monte Sancto on the S. W. It consists of a chain of eminences, 7 or 8 leagues long, and 3 or 4 broad, the loftiest of which is said to exceed two miles in height; and Plutarch and Pliny assert that it projected its shadow, at the summer solstice, on the market place of Myrina, the capital of the island of Lemnos. The cold on its summit is extreme, yet it abounds with many kinds of plants and trees, particularly the pine and the fir, and supplies a multitude of springs and streams. It is now inhabited by the Caloyers, a sort of Greek monks, of the order of St. Basil, who never marry, and live chiefly on olives. They are about 6000 in number, and have 24 monasteries on the mountain, raised to the height of 5 or 6 stories, and well fortified against the assaults of banditti.

Forests.] The forests of Greece, the Greek islands, and the provinces bordering the Archipelago to the north, consist of the common and yew-leaved fir, the pine, the larch, the cedar, the ilex, the kermes oak, the common oak, the oriental plane-tree, the maple, the horn-beam, the sycamore, the elm, the walnut, the chesnut, the ash, and the beech. Considerable forests, composed of olive-trees, mixed with the broad-leaved myrtle, adorn the shores of Crete and Attica; the other fruit trees are the orange, the fig, the vine, the pistachia tree, the pear, the apple, the cherry, the mastich tree, the mulberry, and the pomegranate.

Botany.] Of the shrubs and small trees the most worthy of notice, are the bay-tree, the laurel, two kinds of arbutus, the cypress, the oleander, and the caper bush. A large proportion of the soil in Greece and the Greek islands being calcareous, the Greek flora, in its present imperfect state, consists for the most part of those plants that are peculiar to limestone districts. The island of Crete has always been celebrated for its vegetable productions, of which the following are the chief, and, all of them indicative of a calcareous soil: Cretan woundwort, thistle-leaved acanthus, Cretan origany, Cretan dittany, tragacanth vetch (from which the gum of this name is procured), and iadanum cistus; an elegant shrub, from the leaves and tender stalks of which the fragrant gum ladanon exudes; this is collected by whipping the plants with leathern thongs, to which the gum adheres, and off which it is scraped from time to time.

Zoology.] The zoology of European Turkey presents few peculiarities. The jackal, frequent in Africa and Asia, is not un-

known in these regions ; and among the beasts of burden must be classed the camel. The Turkish horses are celebrated for spirit and form ; and those of Wallachia deserve particular praise. The breeds or qualities of their cattle have been little explained. The sheep, distinguished by the name of Wallachian, have spiral horns of singular elegance ; but the fineness of the fleece would be a more useful distinction. The roe and the red-deer are not unfrequent. The buffalo abounds in the northern provinces. The hare is very numerous.

Mineralogy.] The mineralogy of these provinces is also a barren field ; for the indolence and ignorance of the Turks have generally neglected this branch of opulence ; though from the mines in the adjacent regions of Hungary and Transylvania, and from the ancient accounts, there would be room to expect great mineral treasures. The gold mines of Philippi, about 80 miles to the east of Saloniki, in the time of Philip of Macedon, produced yearly about 10,000 talents, £2,880,000 sterling ; and silver mines were found in Attica, and other quarters. An extensive coal mine is found near Rodosto.

Natural Curiosities.] The natural curiosities in the northern parts, and around mount Hæmus, remain undescribed. Of those in the south, the principal is the grotto of Antiparos, one of the islands of the Cyclades, to the west of Paros. The whole isle is a rock of fine marble, about 16 miles in circumference. In its southern part, about a mile and a half from the sea, rises a rugged cavern, with some ancient inscriptions. After proceeding about twenty paces, appears a dark and low passage, whence the traveller, being provided with lights, descends by a rope, and afterwards by a ladder placed by the side of deep abysses. The path now becomes more easy, and conducts to another steep precipice, which is descended by another ladder. After much fatigue, and some danger, the traveller at length arrives in the grotto, which is supposed to be about 900 feet from the first opening. Tournefort estimates the height of the grotto at about 40 fathoms. The stalactitic marble hangs from the roof, in the most elegant and picturesque forms ; and on the floor are large masses of stalagmite, brownish and less pure, produced by the liquified stone dropping from above. A great distinction between this grotto and others of a similar kind in England, and other countries is, the purity of the material, being marble of a snowy whiteness, and the finest calcareous spar. The marble of Paros has been known and celebrated since the classical times, as the most pure the sculptor can employ ; some, however, prefer that of Carrara, as of a finer and closer grain, and therefore more obedient to the chisel than the Grecian, which is of a large chrystalline grain.

TURKISH ISLANDS.

Candia, anciently *Crete*, lies at the bottom of the Archipelago, and is one of the largest islands in the Mediterranean. It extends from E. to W. about 180 miles in length, between Lon. 23° 30' and

26 30, E. and about 40 from N. to S. containing, according to Hassel, 4318 square miles. This island was settled very early, but historians are not agreed to what nation the Cretans belonged. In the time of the Trojan war it contained 90 cities, and 10 were afterwards built by the Dorians. Of these 40 remained in the time of Ptolemy. The government was for a long period monarchical, in the family of Minos ; afterwards it was republican. In A. D. 66, the island was subdued by Metellus, the Roman Consul, and continued subject to the Romans, till the year 812, when the Saracens reduced it. In 962, they were driven out, and the island was reannexed to the empire. In 1204, it fell into the hands of the Crusaders, and in 1211, was sold to the Venetians. In 1646, the Turks made a descent on the island, and laid siege to the city of Candia, which they were unable to reduce till the year 1669 ; when the whole island, a few forts excepted, fell into their hands. These were not given up by the Venetians till 1715.

Candia is divided into 3 pachaliks, that of Retimo, in the west, Canea, in the middle, and Candia, in the east. The governor of the last is a pacha of three tails, who is general in chief of all the forces of the island. The governors of Retimo and Canea are pachas of two tails, and independent of the pacha of Candia, except in military matters. The pachaliks are divided into districts, each comprising a certain number of villages, some of which belong to the imperial mosques, some to the sultana mother, and the greater number are granted for life to the agas, or lords, who superintend the police, and dispose of most of the taxes. The Greek inhabitants appoint a *capitam* to decide their own differences, and a *dascalos* to register their names and taxes. The population of the island is estimated by Olivier, at 240,000. One half of these are Greeks. The mountains to the S. of Canea and Retimo, are inhabited by the *Spachiots*, supposed to be descendants of the early Cretans, and distinguished from the other Greeks by their tall stature, their courage, and their love of liberty. Under the Romans, the Saracens, the Venetians, and the Turks, they preserved their laws and customs, and found in their bleak and rugged mountains the abode of health and strength, and the safe asylum of liberty. A few remains of the Saracens are found on Mount Ida. They are called *Abadiots*, occupy 20 villages, and are 4000 in number. They are swarthy, meagre, of middling stature, malicious, and vindictive. The Turks here are taller, larger, and more corpulent than the Greeks. The leprosy is the only contagious disorder.

The exports are horses, oil, soap, wax, honey, cheese, raisins, almonds, walnuts, chestnuts, linseed, and liquorice root. The islanders carry on some trade, but it is chiefly in the hands of foreigners. There is scarcely a safe anchorage on the southern coast, but many fine harbors and roadsteads on the northern.

The climate has from remote antiquity been celebrated for its salubrity. Winter is merely a rainy season on the plains, though the high mountains are covered with snow. The refreshing sea-

breeze constantly tempers the heat of summer. The rivers are little more than torrents, swelled by the rains of winter.

Considerable quantities of corn are annually imported. The Candian wines are still delicious, but of a fiery quality. Jupiter would drink no other nectar, than the malmsey of Ida, during his stay on the island. Some cloths are manufactured in silk and cotton, and in silk and flax. Most of the cotton, some of the flax, and all the silk are imported. The olive is not very abundant. Forests of pines, cedars, and firs, cover the declivities of the mountains. Mutton, pork, and poultry are cheap and excellent. Lambs and kids may be obtained in the large towns. The argali and wild goat are plentiful on the mountains. The quail, turtle, ring-dove, loriot, roller, thrush, fig-pecker, wood-cock, black-bird, lark, ortolan and partridge, abound in the woods and fields.

The town of *Candia* is the capital of the island. It is a sea-port on the northern shore about the middle of the island. The harbor is small, but well fortified. The streets are straight, and at right angles. The town contains from 10 to 12,000 Turks, from 2 to 3,000 Greeks, and about 60 Jews. Here are 23 soap houses. The environs present a few fertile plains and rising grounds.

Canea, near the western extremity lies on the coast. The harbor is well defended. The streets are straight and tolerably wide. In the public squares are fountains, that flow with an abundant stream. Most of the houses are of one story, and have flat roofs covered with tiles. The town is surrounded by a strong wall and deep ditch. Here are 20 soap houses. The town is estimated to contain 4000 Turks, 2 or 3000 Greeks, 150 Jews, 4 French, and some Italian houses. Canea is the most commercial town in the island.

Retimo, built on the ruins of the ancient *Rithymna*, about half-way between Candia and Canea, is also a sea-port, on the northern shore. Its harbor is small and shallow. The environs are delightful. It contains about 6000 inhabitants ; half Greeks and half Turks. The citadel on the N. W. of the town is built on a mass of high, steep rocks advancing into the sea. A range of lofty mountains runs the whole length of the island. This range is called the White Mountains. Mount Ida, the highest summit, and once the nursery of Jupiter, is near the middle of the island, about 16 miles W. of Candia.

Negropont, or *Euripo*, the ancient *Euboea*, stretches from S. E. to N. W. along the coast of *Graecia Propria*, and is 96 miles long, and from 8 to 16 broad ; containing, according to Hassel, 482 square miles. It is very fertile, abounding in grain, wine, oil, and excellent fruits. Here are several mountains, which for a considerable part of the year are covered with snow. The highest of these is Mount Ocha, in the south, which very anciently gave name to the whole island. The whole number of inhabitants is stated in the table at 40,000, which is far less than the ancient population. Formerly the island contained numerous cities, the chief of which was Chalcis. The only places now worth notice are Negropont and Castel Rosso. Negropont stands on the

western side of the island, on the narrowest part of the Strait, called the Euripus. It is the see of a Greek bishop. The harbor is large and deep, and seldom without a fleet of gallies. The town is the residence of the admiral of Turkey, who is the governor of Euboea, the smaller islands and of the district of Gallipoli. Population 16,000. Castel Rosso, or Caristo, on the southern extremity of the island, is the see of a Greek bishop, and a town of considerable size.

Lemnos, called by the Turks *Stalimene*, in the northern part of the Archipelago, is 15 miles long and 11 broad. The eastern part of the island is dry and barren; the western is fertile and abounding in springs. There are two high mountains in the island, called *Meschilae*, both anciently volcanic. These were the iron works of Vulcan, to whom the island belonged. It has always been famous for a peculiar kind of earth or clay, which takes the impression of a seal like wax. *Stalimene*, the ancient *Myrina*, is the see of a Greek bishop. The other town is *Cochino*, the ancient *Hephestias*. The whole population is 8,000.*

Andros, a small distance S. E. from Negropont, is 90 miles in circumference. It is generally high and mountainous. Its plains are fertile and well watered. Silk is the principal produce, of which 6000 okes are annually exported, as well as a considerable quantity of oranges and lemons. The other productions are wheat, barley, wine, oil, legumes, herbage, various fruits, honey, wax and cotton. The population is 15,000 souls, distributed into 12 villages. *Andros* is the appanage of a sultana, and yields an annual revenue of 30,000 piastres.

Tino, formerly *Tenos*, one mile S. E. of *Andros*, is 60 miles in circumference, contains about 70 square miles, and is almost every where lofty and mountainous. The inhabitants are the bravest in the Archipelago, and though often attacked, did not submit to the Turks, till 1714, when they were probably betrayed by the governor. Here are reckoned 60 towns or villages, inhabited by 40,000 to 45,000 souls.† No Turk here incommodes the inhabitants. The people annually elect their own magistrates, and are the freest in these seas. The soil is not very fertile, but this is more than compensated by the persevering industry of the inhabitants. The Europeans and Greeks of the large cities in Turkey procure their domestics from *Tino*. The girls usually stay in service 5 years, and then return and marry in the island, always bringing home their wages. The revenue is 36,234 piastres. Silk is largely exported; and figs, oranges, wines, hay, and sheep in small quantities.

Myconi, 12 miles S. E. of *Tino*, is far from fertile, and almost all mountainous. The inhabitants, 6,000 in number, all reside in one town on the coast. They are all farmers or mariners. A little barley, and wine are annually exported. The impost is 7,500 piastres.

Naxia, or *Naxas*, is chiefly covered with high mountains, the

* Langdon says, 40,000.

† According to Hassel, 24,800.

highest of which, called Dia, or Jupiter, affords an extensive prospect of the Archipelago. The town Naxos containing 2000 souls is on the western side. The other inhabitants, exceeding 8000, are scattered through 41 villages. The taxes exceed £1660 sterling. About 600 of the inhabitants are Catholics; the rest are Greeks. The hills are covered with the myrtle, arbutus, lentisk, hypercum, savory, thorny broom, leguminous shrubs, and rock-roses. The rivulets are bordered with the plane-tree, the agnus-castus, and the oleander. The exports are barley, oil, oranges, lemons, citrons, cheese and salt.

Paros, 6 miles west of Naxia, contains 6,000 inhabitants. It has 4 excellent harbors. The celebrated Parian marble is obtained from this island. The best quarries are those in Mount *Marpesus*.

Antiparos, 7 miles S. W. and 16 in circumference, is chiefly celebrated for its grotto. At the entrance it appears to be a rustic cave, in the side of a hill, about 30 feet wide, divided by some natural pillars, between which the ground slopes gently, and then more precipitately, to the bottom of the cavern. At last the descent is by a ladder, to the grotto itself, which is about 300 fathom below the surface, and about 40 fathom high, and 50 wide. It is full of large and beautiful stalactites, hanging from the roof, and covering the floor. When the place is completely lighted up, the mind cannot conceive of a scene more beautiful and magnificent. The ceiling so lofty, that the eye can scarcely reach it, and hung all over with glittering icicles, transparent as glass, yet solid as marble. The sides regularly formed with spars fastened to the walls. The floor, consisting of solid marble, supporting, in various places, magnificent columns, thrones, and altars, as if nature had designed to mock the curiosities of art, and the whole presenting the idea of a vast and brilliant theatre illuminated with an immense profusion of lights. The voice, on speaking, or singing, is redoubled to an astonishing loudness; and upon the firing of a gun the noise and reverberations are almost deafening.

Ios, anciently *Ios*, 40 miles in circuit, is lofty and mountainous, and far from being fertile. It contains 3700 inhabitants, all Greeks, and pays a tribute of 9000 piastres. Homer is said to have been buried here.

Milo, formerly *Melos*, the southwesternmost of the *Cyclades*, is 60 miles in circumference, and has a very large harbor, one of the finest in these seas. The population does not exceed 1500. A little east of the ruins of the town, called *Clima*, by the modern Greeks, in a hill of pumice stone, are numerous ancient catacombs in excellent preservation. These are chambers cut out in the rock for burying places. Most of the catacombs contain 7 sarcophagusses, 3 on each side, and 1 at the farther end. Each sarcophagus, is about 6 feet long, and 15 inches high, surmounted by an arch, the whole dug in the rock. Those at Alexandria, on the contrary, are cells dug deeply into the walls of galleries. The inhabitants now employ these catacombs as cisterns to catch the winter rains. Ships generally stop at this island for pilots, through the Archipelago.

Santorini, formerly *Thera* and *Caliste*, is 40 miles in circumference, and in shape like a horseshoe. The coast rises abruptly from the sea, often to the height of 600 feet. The road is 7 miles long, and 6 deep. The water in it has a depth of from 250 to 300 fathom, so that ships can find no anchoring ground. The population exceeds 12,000 ; about one sixth of which are Roman Catholics. Here are two bishops, one Latin, the other Greek, and two nunneries. The inhabitants are distinguished for their industry, temperance, probity, and good morals. The men are employed chiefly in the culture of the vine, and of cotton. The women make cloths, caps, and stockings, which are sent to Russia and Italy. The best wine, called *vino santo*, is sent to Russia.* The revenue is 55,000 piastres. In proportion to its extent this is the richest and most populous of all the islands in the Archipelago. There are 5 large villages, and numerous smaller ones.

The other considerable islands will more properly fall under the description of Turkey in Asia.

ASIA.

AS Asia exceeds Europe and Africa in the extent of its territories, it is also superior to them in the serenity of its air, the fertility of its soil, the deliciousness of its fruits, the fragrancy and balsamick qualities of its plants, spices and gums ; the salubrity of its drugs ; the quantity, variety, beauty, and value of its gems ; the richness of its metals, and the fineness of its silks and cottons. It was in Asia, according to the sacred records, that the all-wise Creator planted the garden of Eden, in which he formed the first man and first woman, from whom the race of mankind has descended. Asia became again the nursery of the world after the deluge, whence the descendants of Noah dispersed their various colonies into all the other parts of the globe. It was in Asia that God placed his once favourite people, the Hebrews, whom he enlightened by revelation delivered by the prophets, and to whom he gave the Oracles of Truth. It was here that the great and merciful work of our Redemption was accomplished by his Divine Son ; and it was from hence that the light of his glorious Gospel was carried with amazing rapidity into all the known nations, by his disciples and followers. Here the first christian churches were founded, and the christian faith miraculously propagated and cherished, even with the blood of innumerable martyrs. It was in Asia that the first edifices were reared, and the first empires founded, while the other parts of the globe were inhabited only by wild animals. On these accounts, this quarter claims a supe-

* Within a few years, however, several cargoes have been purchased for the English market.

Besides these numerous original nations, the Malays and Asiatic islanders constitute another large and distinct class of mankind, with a peculiar speech, in the south of the extensive continent of Asia.

Divisions.] Though Pinkerton's arrangement will be followed in the description of the different parts of Asia, it will be useful here to insert Hassel's Table of Divisions, which follows.

GRAND DIVISIONS OF ASIA.	No. of Sq. Miles.	Population.	No. of Inhab. on Sq. Mile.	Population, according to Montelle and Malte.	Finances. Guilders.	Military Force.	Population. Guilders.
I. EMPIRE OF CHINA.							
1 China Proper	4,550,000	188,500,000	40	110,000,000	810,000		
2 Chinese Tartary	1,782,546	150,000,000	84	110,000,000	300,000,000		
3 Tibet, Butan, Nepal	2,189,000	3,000,000	1 $\frac{8}{32}$	3,850,000			
4 Kingdom of Tchao-Sien	370,000	12,000,000	32	33,000,000			
5 Kingdom of Tongkin	88,000	1,500,000	17	3,000,000			
6 The Liqueo Isles	154,000	8,000,000	52				
7 Kingdom of Annan	165,000	10,000,000	57				
II. HINTER INDIA,							
1 British Dominions	1,128,500	78,858,000	70	80,000,000	210,000		
2 Mahratta States	651,000	45,075,000	69				
3 Jaiver, Rampore, Seerdun	355,000	28,343,000	77				
4 Ceylon, (Independent)	1,200	100,000	83				
5 French Colonies	14,800	600,000	40				
6 Danish Colonies	635	50,000	79				
7 Goa	438	50,000	114				
	723	40,000	55				
III. FARTHER INDIA,							
1 Birman Empire	490,000	23,900,000	49	24,000,000			
2 Siam and Malacca	233,000	17,000,000	73				
3 Laos	142,500	1,000,000	13				
4 Assem, &c.	81,300	5,000,000	37				
IV. INDIAN ISLANDS.							
1 Borneo	32,000	2,000,000	61				
2 Sumatra	308,000	18,676,000	23	6,000,000			
	312,400	5,000,000	16				
	176,000	4,500,000	26	2,250,000			

ASIA.

GRAND DIVISIONS OF ASIA.	No. of Sq. Miles.	Population.	No. of inhabitants on a Sq. Mile.	Population, according to Montelle and Malte.	Finances, Military Force.	No. of inhabitants on a Sq. Mile.	Population.	No. of inhabitants on a Sq. Mile.	Population, according to Montelle and Malte.	Finances, Military Force.
3 Celebes and Salegar	93,600	3,000,000	32	2,000,000						
4 Java and Madura	52,300	976,000	19	916,000						
5 Timor, the Kuriles, &c.										
6 The Nicobar, Maldives, Lakedives, & Andaman	33,600	1,200,000	36	3,000,000						
7 Mindanas										
8 The Manilles	128,000	3,800,000	30	3,000,000						
9 The Carolinas										
10 Marian Isles										
11 Pelew Isles	11,000	200,000	18							
12 Sulupin Isle										
V. JAPAN EMPIRE,	189,000	15,000,000	80	10,000,000	424,500,000					
VI. ASIATIC RUSSIA,	5,972,000	9,274,000	11 $\frac{1}{2}$	2,000,000	Guilders.	100,000				
VII. DSHAGATAI, with the country of KIRGISENS*	685,000	2,000,000	3	4,880,000						
VIII. The country of CAUCASUS,	82,000	800,000	10	3,000,000						
IX. PERSIA,	1,360,500	22,000,000	18	19,000,000						
1 East Persia	820,000	19,000,000	19							
2 West Persia	482,500	3,000,000	6							
X. TURKEY IN ASIA,	532,000	11,090,000	23	13,600,000						
XI. ARABIA,	991,000	10,000,000	10	10,000,000						
Whole of Asia, 16,728,000†		380,098,000†		334,496,000		23				

* This is the German name, which we cannot translate.

† Fabri, 14,020,000; Templeman, 14,050,000; Montelle, 17,490,000.

‡ Volney, 240,000,000; Busching, 300,000,000; Gatterez, 500,000,000; Stusswilch, 650,000,000.

Progressive Geography.] The progressive geography of this quarter of the globe might afford an important and interesting subject of discussion, if treated at due length, as embracing the various discoveries which, at long intervals of time, successively disclosed its vast extent. The most authentic information concerning the knowledge of the ancients, is to be found in the geography of Ptolemy ; but modern commentators differ in the elucidation of his text ; however, it appears probable that not above one quarter of Asia was known to the ancients, and this knowledge was little increased till Marco Polo, whose travels became well known in Europe in the beginning of the 14th century, established a memorable epoch in geography, by passing to China, and disclosing the extent of that country, the islands of Japan, and a faint intelligence of other regions, illustrated and confirmed by recent accounts. The wide conquests of the famous Zingis, in the beginning of the 13th century, first opened the discovery of the distant parts of Asia, the Monguls, whose sovereign he was, being situated to the east of the Huns, who had before diffused terror over Europe. The first seat of the Monguls was in the mountains, which give source to the river Onon ; and at a short distance to the S. W. was Kara-kum, the first capital of the Mongul empire. The victories of Zingis extended from Cathay, or the northern part of China, to the river Indus ; and his successors extended them over Russia, while their inroads reach Hungary and Germany. This widely diffused power of the Monguls naturally excited an attention and curiosity, never stimulated by a number of petty barbarous tribes ; and at the same time facilitated the progress of the traveller, who, as in Africa at present, had been formerly impeded by the enmities of diminutive potentates. By force of arms the Monguls also first opened the obscure recesses of Siberia. Sheibani Khan, A. D. 1242, led a horde of 15,000 families into these northern regions, and his descendants reigned at Tobolskoy above three centuries, till the Russian conquest.* Two European travellers, Carpini and Rubruquis, were commissioned to inspect the power and resources of the new empire of the Monguls ; the latter found at Kara-kum a Parisian goldsmith, employed in the service of the khan ; and by Carpini's relation it appears, that from their brethren in Siberia, the Monguls had received some intelligence concerning the Samoieds.

Thus the discovery of Asia, which had been nearly dormant since the time of Ptolemy, began to revive in the 13th century. Yet after the publication of Marco Polo's travels, little was done for two centuries ; and the authenticity of his accounts even began to be questioned. One man, indeed, of great mental powers, was impressed with their veracity, and in consequence accomplished a memorable enterprize. This was Christopher Columbus, who was led by the relation of Polo to conceive that, as Asia extended so far to the east, its shores might be reached by a short navigation from the western extremity of Europe. In this erro-

* Gibbon, xi. 421.

neous idea, when that great man discovered the islands, now called the West Indies, he thought that he had arrived at the Zipango of Polo, or Japan : and thus the name of India was absurdly bestowed on those new regions.

After the discovery of America and the Cape of Good Hope, the maritime parts and islands of Asia were successively disclosed. Yet the recent voyages of the Russian navigators, of the immortal Cook, and of the unfortunate La Perouse, evince that much remained to be done ; and concerning the interior of Siberia, scarcely any solid information arose, till Peter the Great, after the battle of Pultowa, sent many Swedish prisoners into that region, and Strahlenberg, one of the officers, published an account of Siberia. This knowledge was greatly improved and increased by the well known genius of Pallas, and others. Yet our knowledge of Asia is far from being perfect, especially in respect to Daouria, and other regions near the confines between the Russian and Chinese empires ; not to mention central Asia in general, Tibet, and some more southern regions, nor had even the geography of Hindostan been treated with tolerable accuracy till Major Renneil published his excellent map and memoir. It is almost unnecessary to remind the reader of the recent discoveries to the south of Asia, in which the interior, and southern coast of New Holland, remain to be explored ; with other defects of smaller consequence.

The principal seas, bays, straits, gulfs, channels, lakes, mountains, and deserts, on the Eastern Continent, have already been described.*

Governments.] The Asiatic governments are almost universally despotic, and the very idea of a commonwealth seems to be unknown. The mildest systems are perhaps those found in Arabia.

Arrangement.] The Turkish empire in Asia constitutes a natural and easy transition from the description of Europe ; and the Russian empire, though in population far inferior, yet in military and political force transcends that of China.

From the Russian empire in Asia the transition is easy to that of China, a bordering state : after which shall be described Japan, and a new great power, the Birman empire. Hindostan and Persia being now divided into several distinct sovereignties, and Arabia containing many independent states, the scale of political importance becomes transitive and indistinct ; and may justly yield in such cases to mere geographical arrangement. Hence the smaller states of India beyond the Ganges, or between Hindostan and China, will follow the Birman empire, to which, or to China, they may perhaps soon be subjected. A western progress leads to Hindostan, Persia, and Arabia : and a short account of the various interesting and important islands in the Indian and in the Pacific oceans, will close this department of the work.

TURKEY IN ASIA.

CHAPTER I.

HISTORICAL GEOGRAPHY.

EXTENT AND BOUNDARIES, DIVISIONS, ORIGINAL POPULATION, HISTORICAL EPOCHS, ANTIQUITIES, POPULATION, MANNERS AND CUSTOMS, LANGUAGES, LITERATURE, EDUCATION, UNIVERSITIES, CITIES AND TOWNS, EDIFICES, ROADS, INLAND NAVIGATION, MANUFACTURES AND COMMERCE.

Extent.] THIS region extends from the shores of the Archipelago, to the confines of Persia ; a space of about 1050 miles. The boundaries towards Persia are rather ideal than natural, though somewhat marked by the mountains of Ararat and Elwend. In the north, the Turkish territories are now divided from the Russian by the river Cuban, and the chain of Caucasus ; in the south they extend to the junction of the Tigris and the Euphrates, which last river, for a considerable space, divides the Turkish possessions from those of the Arabs. From the river Cuban to the junction of the Tigris and Euphrates, is about 1100 miles.

Divisions.] This extensive territory, which in itself would constitute an empire, could it resume its former population, is divided into nine or ten provinces. *Natolia*, the most westerly, is followed by *Karaman* in the south, and *Roum* in the north-east. To the north of Armenia are *Guria*, or *Guriel*, *Mingrelia*, and the *Abkhas* of Caucasus, the ancient Circassians. Armenia is also styled *Turcomania* ; to the south of which are *Kurdistan*, and *Irak Arabi*, a part of ancient Persia around the celebrated capital, Bagdad. The ancient Mesopotamia, between the Tigris and the Euphrates, now partly corresponds with the province of *Algezira* ; and the classical name of *Syria*, or *Soria*, is still allotted to the celebrated countries along the eastern extremities of the Mediterranean. Some of these provinces are of comparatively recent acquisition ; Bagdad having belonged to Persia till 1638 ; while on the contrary Erivan, reconquered by the Persians in 1635, has remained free from the Turkish domination.

These provinces are subdivided into governments, arbitrarily administered by *pashas*.

Original Population.] The original population of these regions consisted chiefly of Scythian nations, mingled with a few Assyrians from the south. At present the ruling language is the Turkish, next to which may be placed the modern Greek ; but the Arabic, Syrian, Persian, and Armenian, with various dialects used by the tribes on the Black Sea, indicate the diversity of population.

Historical Epochs.] The chief epochs of Turkish history have already been mentioned, in describing their European possessions. Armenia and Georgia were subdued by the Turks in the 11th century, and the whole of Asia Minor rapidly followed. Their kingdom of Roum extended from the Euphrates to Constantinople, and from the Black Sea to the confines of Syria. Successive warlike princes acquired additional territory from the Mamelukes of Egypt and the Persians. Syria, formerly attached to Egypt, was conquered by Selim II. in 1516; Tauris and Diarbekr, which last had formerly belonged to Persia, were subdued by the same monarch; and in 1589, Abbas, the great sovereign of Persia, was obliged to yield three provinces to the Ottomans; and Bagdad, as already mentioned, with the surrounding province of Irak Arabi, became subject to the Turks in 1638. The present limits seem to have been fixed by the treaty between the Porte and Persia, 1736, since which period the Turks have been chiefly occupied in their own defence against the Russians; but their ascendancy over Persia had been such, that in 1727 they had acquired the territory from Erivan to Tauris, or Tebriz, and thence to Hamadan, a boundary which seems indeed more precisely marked by nature than the present.

Antiquities.] The antiquities of Asiatic Turkey, once the chosen seat of the arts, are numerous and important. The most splendid ruins are those of Palmyra, or Tadmor, in the desert, about 150 miles to the S. E. of Aleppo, at the northern extremity of the sandy wastes of Arabia.

Balbec, the ancient Heliopolis, is about 50 miles N. W. of Damascus, the most remarkable ruin being that of a temple, supposed to have been dedicated to the sun.

Recent investigation has disclosed another remarkable scene of antiquities, in the site and celebrated plain of Troy.*

Population.] The Turkish empire in Asia is estimated by Pinkerton at 470,400 square miles; and the population at ten millions; which, allowing eight for the European part, will render the total 18,000,000.† Geographers have, contrary to the united voice of travellers, considered Egypt as a Turkish province; while in fact it was only occasionally tributary, and was subject to the military aristocracy of the Beys. Some of the maritime Mahometan powers have likewise assisted the Porte with ships in time of war; but cannot with any justice be regarded as subject to the Ottoman sceptre. The population of these African states is therefore foreign to the present consideration.

In the Caucasian mountains, not far from the Black Sea, is a people called Sonnas, from their country of this name, amounting to about 200,000 souls, inhabiting 60 villages, some of which are towns of 900 houses. These people acknowledge Jesus Christ to

* See Morritt's vindication of Homer, &c. 1798, 4to; Dallaway's Constantinople, and Dalzell's translation of Chevalier's memoir.

† Hassel estimates the square miles at 533,000, and the population at 11,090,000, and Montelle and Malte, at 13,600,000. But both these geographers include Egypt in their calculations, which accounts for the difference.

be their only King and Saviour. They pray that God would bless them for Christ's sake, observe the sabbath, have priests who baptize their children, and administer the sacrament of the supper. They have many church books, but know not the meaning of them. They believe in a future judgment. They are said, some of them, to labor under deep convictions of sin, and to pray night and day. They consider their preservation and the preservation of Christianity among them as a miracle. They inoculate their children for the small pox ; have gardens enclosed with stone walls, and abundance of fruit, and live in harmony and comfort.*

Manners and Customs. See *Turkey in Europe.*] The laxity of the government renders travelling in Asia Minor very unsafe, and has proved a great impediment to any exact geographical knowledge of these regions. Under a prudent government the wandering hordes of Turcomans and Kurds would be expelled ; and regular troops and garrisons maintained on the frontiers ; whence industry and the arts might again visit this classical territory.

Cities and Towns.] The capital of the Turkish empire has been already described. Next in dignity and importance is the city of Haleb, or Aleppo, supposed to contain about 250,000 inhabitants. This city is constructed with some elegance, and the tall cypress trees, contrasted with the white minarets of numerous mosques, give it a most picturesque appearance.† The buildings and population seem to have been on the increase, but the adjacent villages are deserted. The chief languages are the Turkish and Arabic. The manufactures of silk and cotton are in a flourishing condition, and large caravans frequently arrive from Bagdad and Bassora, charged with the products of Persia and India ; Consuls from various European powers reside here, to attend the interests of the respective nations.

Damascus is supposed to contain about 180,000 souls. It was formerly celebrated for the manufacture of sabres, which seem to have been constructed by a method now lost, of alternate thin layers of iron and steel, so as to bend even to the hilt without breaking, while the edge would divide the firmest mail. When Timur subdued Syria, about the beginning of the 15th century, he ordered all the artists in steel to migrate into Persia. The manufactures now consist of silk and cotton, and excellent soap. From the Mediterranean are imported metals and broadcloths : and the caravans of Bagdad bring Persian and Indian articles. This city also increases, by the gradual depopulation of the villages and country, which last always presents the chief symptoms of national prosperity, or decline. The Pashalik of Damascus is esteemed the first in Asia ; and the office of Pasha has, in the decline of the Turkish empire, become in some measure hereditary, with absolute power of life and death, and without any appeal.

Smyrna may be regarded as the third city in Asiatic Turkey, containing about 140,000 souls. This flourishing seat of Euro-

* Brunton's Letter, Feb. 1806.

† Russel's Aleppo. Browne, 384, &c.

pean commerce, and chief mart of the Levant trade, is said to have been founded by Alexander the Great, eminently distinguished from all other conquerors by the foundation, and not the destruction of cities. In the wars between the Turks and the Greeks, Smyrna sunk into great decline ; and was taken with vast slaughter, by Timur, in 1402. The excellence of the haven renders Smyrna the centre of all the traffic of Asia Minor ; but the frequent visits of the pestilence greatly impede its prosperity.* It has been observed that the sands in the bay of Smyrna gradually increase, and may probably in time impede the commerce. Earthquakes are here terrible. The city of Smyrna is poorly built. The houses in general are mere mud huts, and the streets loathsome and filthy in the extreme. The street of the Franks is the principal commercial street. It contains many well built houses. The warehouses are all fire-proof. The merchandise imported here is dealt out to the purchasers from the Bazars. The Bazars are long covered streets, containing many large stone buildings, in which the goods are deposited. Many of these Bazars contain merchandise to a great amount. Each Bazar is appropriated to one species of goods only. The Cassino is the only place of public amusement at Smyrna. It was built by the Franks, for the purposes of information and amusement. It consists of several rooms for conversation and reading, a drawing room, and a ball room. The newspapers from all parts of Christendom are here received, and lie open for the perusal of the subscribers and strangers invited by them. The only public buildings in Smyrna are the mosques and churches. The streets of Smyrna are too narrow to admit of wheel carriages of any kind. Packages are carried by porters. Merchandise sent into the interior always goes by caravans of camels, mules, or horses. The climate of Smyrna is temperate. During the hot summer months, the inhabitants resort to the neighboring villages, which are but a few miles from the city. The locusts of Smyrna are a very serious evil, and the destruction they cause, immense. Wherever they pass they devour the leaves of every tree, and leave no vestige of vegetation. At one season it is said they destroyed in one night every vegetable matter, and even the roots in the gardens were totally devoured.†

Prusa is a beautiful city, in a romantic situation, at the northern bottom of mount Olympus. By Tournefort's computation of families the inhabitants may be about 60,000. It is enlivened by numerous springs, which descend from the mountains, and by the proximity of the hot baths. Prusa was formerly the chosen residence of the sultans, and contains many of their tombs. Magnisi, or Magnesia, is also a city of some repute in this quarter of the empire ; and Kircagatch has risen to considerable population, from the cultivation of cotton, being about 40 miles N. E. of Magnisi, on the route to Prusa.

Angora contains about 80,000 inhabitants ; and is a striking, and

* Chandler, 65.

† Langdon's MS.

agreeable city, in a lofty situation. The trade is chiefly in yarn, of which the English shalloons are made ; and in their own manufacture of Angora stuffs, made chiefly of the fine hair of a particular breed of goats, which, like that of the cats, occurs in no other country.

Tokat is also a flourishing place. The inhabitants are computed at 60,000. The situation is singular, amidst rugged and perpendicular rocks of marble, and the streets are paved, which is a rare circumstance in the Levant. Silk and leather are manufactures of Tokat ; but the chief is that of copper utensils, which are sent to Constantinople, and even to Egypt. The copper is from the mines of Gumiscana, at the distance of three days journey from Trebisond ; and from those of Castan Boul, yet richer, and situated ten days journey from Tokat, on the west towards Angora.*

Basra or Bassora, on the estuary of the Euphrates and Tigris, must be regarded as rather belonging to an independent Arabian prince, who pays dubious homage to the Porte, but as it has an intimate connexion with Asiatic Turkey, it may be here briefly mentioned as a city of 50,000 inhabitants, and great commercial consequence, being frequented by numerous vessels from Europe and Asia, and the seat of an English consul. Here the various products of Europe and India are exchanged for those of Persia ; and opulent caravans proceed to the chief cities of Asiatic Turkey, to all which it is the most central part of oriental trade.

The great and romantic Bagdad, the seat of the Califs, and the scene of many eastern fictions, has now dwindled into a town of about 20,000 inhabitants. Not far to the south are some ruins of the celebrated Babylon, which have been ably illustrated in a recent work of Major Rennell.† It was the capital of Chaldea. "A famous city, built four square, *sixty miles* in circumference, fifteen on each side. The walls were 87 feet thick, and 350 high, on which were built 316 towers, or according to others, 250, three between each gate, and seven at each corner. There were 100 gates, 25 on each side, all of solid brass. From these ran 25 streets, crossing one another at right angles, each 150 feet wide, and 15 miles in length. A row of houses faced the wall on every side, with a street of 200 feet wide between them and it. Thus the whole city was divided in 676 squares, each of which was four furlongs and a half on every side. All around these squares, stood the houses fronting the streets, and the empty space within served as gardens and other needful uses."

The prophet calls Babylon the golden city, Isaiah, xiv. 4. The glory of kingdoms, the beauty of Chaldea's excellency. Chap. xiii. 19 ; yet the prophets presumed to foretel its complete ruin. Jeremiah said, "The mighty men of Babylon would forbear to fight ; they have remained in their holds ; their might hath failed ; they became as women." Agreeably to this Xenophon tells us that "when Cyrus came before the place, he could not provoke

* Tournefort, ii. 424.

† Geography of Herodotus.

them to venture forth, and try the fortune of arms, though he sent a challenge to the king." A variety of other circumstances in the progress of its destruction are foretold, which history confirms. The same prophet said, "that it should become *desolate*, that it should not be *inhabited*, that the *wild beasts* of the desert should be there." Let us examine if Babylon *has* fallen; if these circumstances *have* taken place; if so, then our faith in revelation is confirmed. Diodorus Siculus says, that in his time, but a small part of the city was inhabited. Its destruction had then begun; it was gradual. Not long after, Strabo reports that the Persians had demolished a part of the city; that the court was removed to Seleucia; that the great city had become a desert. In the time of Pliny, Babylon was a place of "solitude." Maximus Tyrius mentions its "lying waste and neglected." Constantine the Great says, he had been an eye witness of its "desolate and miserable condition." In the 4th century after Christ, Jerome says, "Its walls served as a fence, and the city as a park, in which the kings of Persia kept wild beasts for hunting." In the 12th century Benjamin, a Jew, asserts that "Babylon was laid waste, some ruins remaining, over which men dared not to pass on account of serpents and scorpions." In 1574, Rauwolf says, "The tower of Babylon was so ruinous, so full of venomous creatures, that no one dared to approach nearer than half a league, except during two months in the winter." More than 2000 years before, a prophet had predicted this: "Their houses *shall* be full of doleful creatures; the wild beasts of the islands shall cry in their *desolate* houses, and dragons in their pleasant palaces." Petrus Valensis was there in 1616; he says "there was a heap of ruined buildings, like a mountain, which was probably the tower of Nimrod." Jannier says, "in this neighborhood we saw the foundation of a city, and some of the walls standing, upon which 6 coaches might go abreast." The chronicles of the country said, "Here stood Babylon." Mr. Hanway tells us that in 1743, "These ruins were so effaced, that there was hardly any vestiges of them to point out the situation of the city." Mr. Jackson, in 1797, was at Bagdad, and says, at a little distance "are still to be seen *some* ruins of ancient Babylon;" but it seems he did not go to examine whether it was true. Mr. Wood, who visited the ruins of Palmyra in 1751, presumes to say "There is not a stone to tell where Babylon was situated." By these brief extracts from various travellers, we see how gradually, how punctually the prophecies respecting Babylon have been fulfilled. "They shall not take of thee a stone for a corner, nor a stone for foundations; but thou shalt be desolate for ever, saith the Lord."

Many an important city of antiquity has sunk into a village, and even the village often into a mass of rubbish, under the destructive domination of the Turks, perhaps the only people whose sole occupation has been to destroy. The maps are crowded with many names, now only known by miserable hamlets; and an enumeration which would seem short may yet be complete.

The ancient and celebrated city of *Jerusalem* is reduced to a

mean town, chiefly existing by the piety of pilgrims. This city will ever be interesting to the heart of sensibility. The divine mission of Jesus Christ is authenticated in every dismal street. The naked rocks and uninhabited hills proclaim the truth of christianity. Jesus Christ foretold the most deplorable calamities which the place has suffered. It is impossible to read the prophecies of Christ, and the history of Josephus, and retain a reasonable doubt of the divinity of the Scriptures. Christ declared that the place "should be trodden down of the *Gentiles*." To this day Gentiles possess the city. It is inhabited by Turks, Arabs, and a few Christians. The Jews do not choose to dwell here ; they say it must undergo a conflagration and inundation, when the Messiah comes to purify it from the defilements of Christians and Mahometans. Towards the frontiers of Persia the ravages of frequent war have spread additional destruction ; yet Erzeron, the capital of Armenia, retains about 25,000 inhabitants.

Tyre was once a famous city of Phenicia, and anciently a place of more extensive commerce than any town in the world. In the time of the prophet Isaiah, "Her merchants were princes." In the time of Alexander, it was encircled by a wall 150 feet high. This city arrested the progress of his conquering army for seven months. But for their wickedness God threatened by the voice of prophecy, that this mart of nations should become desolate. "I will cause the noise of thy songs to cease ; I will make thee like the top of a rock. *Thou shalt be a place to spread nets upon. Thou shalt be built no more.*" This prophecy was evidently delivered by divine inspiration : for it has been literally fulfilled. The place is now buried in its own ruins. There is nothing here now to give the least idea of its former glory and magnificence. There is, indeed, on the N. side, one old Turkish castle, beside which, nothing is to be seen, but fallen, broken pillars. Not a single habitation for human beings is there on this once celebrated spot. It is totally abandoned, excepting by a few fishermen, who sometimes visit it to fish in the surrounding waters, and *on its rocks dry their nets*, sheltering themselves under the ruins of its ancient grandeur, lon. 35° 48', E. lat. 33° 23', N.

Manufactures.] The chief manufactures of Asiatic Turkey have been already incidentally mentioned in the preceding account of the cities ; to which may be added the excellent carpets so frequent in England and America. These with rhubarb, and several other drugs, may be regarded as the chief articles of commerce.

The Levant, or Turkey trade, was formerly of great consequence to Great Britain ; but since the middle of the last century has been more advantageous to France.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Climate and Seasons.] THE climate of Asia Minor has always been considered as excellent. There is a peculiar softness and serenity in the air, not perceptible on the European side of the Archipelago. The heat of the summer is considerably tempered by the numerous chains of high mountains, some of which are said to be covered with perpetual snow.

Face of the Country.] The general appearance of Asiatic Turkey may be regarded as mountainous ; but intermingled with large and beautiful plains, which, instead of being covered with rich crops of grain, are pastured by the numerous flocks and herds of the Turcomans. The soil, as may be expected, is extremely various ; but that of Asia Minor is chiefly a deep clay ; and wheat, barley, and durra, form the chief products of agriculture.* But excellent grapes and olives abound ; and the southern provinces are fertile in dates. In Syria the agriculture is in the most deplorable condition. The peasants though not sold with the soil, like those of Poland, are, if possible, yet more oppressed ; barley bread, onions, and water, forming their constant fare.†

Rivers.] The principal river of Asiatic Turkey is, beyond all comparison, the Euphrates, which rises from the mountains of Armenia, a few miles to the N. E. of Erzeron ;‡ and chiefly pursues a S. W. direction to Semisat, where it would fall into the Mediterranean, if not prevented by a high ridge of mountains. In this part of its course the Euphrates is joined by the Morad from the east, a stream almost double in length to that of Euphrates ; so that the latter river might more justly be said to spring from mount Ararat, about 160 British miles to the east of the reputed source. At Semisat, the ancient Samosata, this noble river assumes a southerly direction ; then runs an extensive course to the S. E. and after receiving the Tigris, falls by two or three mouths into the gulf of Persia, 50 miles S. E. of Bassora. The comparative course of the Euphrates may be estimated at about 1400 miles. Its water is remarkably pleasant. It is muddy when first taken up, it soon becomes clear ; and is by some preferred to wine or spirits. The tide raises its water more than 30 leagues above its mouth, lon. 66° 55', E. lat. 29° 50', N.

Next in importance is the Tigris, which rises to the north of the Medan, about 150 miles south from the sources of the Euphrates, and pursues nearly a regular direction S. E. till it joins

* Browne, 418.

† Volney, ii. 418.

‡ Tournefort, ii. 198.

the Euphrates, below Korna, about 60 miles north of Bassora ; after a comparative course of about 800 miles. The Euphrates and the Tigris are both navigable for a considerable distance from the sea.

The third river in Asiatic Turkey is that called by the Turks Kizil Irmak, the celebrated Halys of antiquity, rising in mount Taurus, not far from Erekli, but by other accounts more to the east, and pursuing a winding course to the north, nearly across the whole of Asia Minor, till it join the Euxine sea, on the west of the gulf of Sansoun. The river Sacaria, the ancient Sangaris, rises about 50 miles south of Angora, and running to the N. W. joins the Euxine, about 70 miles east of Constantinople.

In the next rank may be placed the classical river of Mæander, rising north of the ancient city of Apamia, and running, in a winding stream, about 250 miles. It is called by the Turks the Great Mæander, to distinguish it from a small tributary stream, which resembles it in mazes. The Minder, not far from its mouth, is about 100 feet broad ; with a swift, muddy, and very deep current, having received a considerable accession of waters from the lake of Myus.

The Sarabat, or ancient Hermus, renowned for its golden sands, joins the Archipelago about 90 miles north of the Minder, after a course of similar length.

The other rivers of Asia Minor are far more inconsiderable, though many of them are celebrated in classical history and poetry.

The chief river of Syria is the Orontes, now called Oron or Osi, rising about 80 miles N. of Damascus, and running nearly due north till it suddenly turns S. E. near Antioch, after which it soon joins the Mediterranean.

Jordan, is a river of Palestine, rising from lake Phiala, in Anti-Libanus. It runs under ground 15 miles, then breaks out at Penneum ; passes through Samachomite Lake, anciently called Meron, 6 miles long, 4 broad. Two miles after its leaving the lake, is a stone bridge, of 3 arches, called "Jacob's Bridge," supposed to have been built before the days of Jacob. After separating Galilee from Tracontis, it passes through the lake Tiberias ; thence, after a course of 65 miles, part of the way through a vast and most horrid desert, receiving the Carith, (on the bank of which Elijah was fed by ravens) and many other tributary streams, it empties into the Dead Sea. It is a very rapid river, generally about 4 or 5 rods wide, and 9 feet deep, and except in freshets, runs 2 yards below the brink of its channel. The waters are turbid, but very wholesome.

Lakes.] Asiatic Turkey also contains numerous lakes. That of Van, in the north of Kurdistan, is the most considerable, being about 80 miles in length, from N. E. to S. W. and about 40 in breadth : it is said to abound with fish.

In Syria is *Asphaltites Lake*, known also by the names of the *Salt Sea*, *Dead Sea*, and *Sea of Sodom*, is S. of Jordan, and on the S. E. border of the ancient Canaan. According to Josephus, it is 72 miles

long, and about 19 broad. Modern travellers, however, make it only 24 miles long, and 6 or 7 broad. The rivers Jordan, Arnon, Kidron, and other streams, empty into this lake. It has no visible communication with the sea. The great quantities of bitumen, slime or mineral pitch in this lake, renders its waters unfit to drink. No fish can live in it. The sulphurous stream affects even the fruit on the shore in some parts. This lake is supposed to occupy the ancient site of Sodom, Gomorrah, Admah, and Zeboim, and the valley of Siddim. After these cities were destroyed, in the manner related in the scriptures, it is supposed the spot on which they stood was sunk by an earthquake; and some have related that, when the waters of this lake are low, the ruins of these cities are still to be seen. When the Saviour speaks of "the lake of fire and brimstone," he is supposed to allude to this lake *Asphaltites*, which is considered, as the lasting monument of those awful showers of fire and brimstone, by which Sodom and Gomorrah, and the other cities of the plain perished for their vile lusts.

The lake of Rackama, to the south of Hilla, and the ancient Babylon, is about 30 miles in length, and flows into the Euphrates.

Towards the centre of Asia Minor, there is a remarkable saline lake, about 70 miles in length, and a mile or two in breadth, being the Tatta, or Palus Salsa of D'Anville's ancient geography.

Numerous other small lakes appear in Natolia, among which may be particularly mentioned that of Ulubad, anciently styled the lake of Apollonia, which, according to Tournefort, is about 25 miles in circumference, and in some places seven or eight miles wide, sprinkled with several isles and some peninsulas, being a grand receptacle of the waters from mount Olympus. The largest isle is about three miles in circuit, and is called Abouillona, probably from the ancient name of the city, which stood on it. About 50 miles to the N. E. was the lake called Ascanius, by the ancients, now that of Ishnik.

Mountains.] Many of the mountains of Asiatic Turkey deserve particular attention, from their ancient celebrity. The first rank is due to the Taurian chain of antiquity, which was considered as extending from the neighborhood of the Archipelago to the sources of the Ganges, and the extremities of Asia, so far as discovered by the ancients. But this notion little accords with the descriptions of modern travellers, or the researches of recent geography. The Caucasian mountains have been well delineated by the Russian travellers, as forming a range from the mouth of the river Cuban, in the N. W. to where the river Ker enters the Caspian, in the S. E. A chain extends from Caucasus S. W. to near the bay of Scanderoon. This ridge seems the Anti Taurus of antiquity: but various parts of it were known by different names. At the other extremity of the Caucasus, other chains branch out into Persia; which they pervade from N. W. to S. E. but they may all be justly considered as terminating in the deserts of the southeastern part of Persia. The chain of Taurus,

now called Kurun, extends for about 600 miles E. and W. from the Euphrates to near the shores of the Archipelago. A recent traveller found the ascent and descent, between Aintab and Bos-tan, to occupy three days ; and the heights abound with cedars, savines, and junipers.

Towards the east of Armenia, is Ararat. It is a detached mountain, with two summits ; the highest being covered with eternal snow. In one of the flanks is an abyss, or precipice, of prodigious depth, the sides being perpendicular, and of a rough black appearance, as if tinged with smoke. This mountain belongs to Persia, but is here mentioned on account of connexion.

Beyond Ararat are branches of the Caucasian chain ; to which, as is probable, belong the mountains of Clevend, which seem to be the Niphates of antiquity.

In Syria the most celebrated mountain is that of Lebanon, or Libanus, running in the southerly and northerly direction of the Mediterranean shore, and generally at the distance of about 30 or 40 miles. It is about 100 leagues in circumference. It has Mesopotamia E. Armenia N. Palestine S. and the Mediterranean W. The ruins of the ancient city of Sidon are near this mountain. It is composed of 4 enclosures of mountains, which rise one upon the other. The first is very fruitful in grain and fruits ; the second is barren, covered with thorns, rocks, and flints ; the third, though higher, enjoys a perpetual spring, the trees being always green, and the orchards filled with fruit ; in a word, it is so agreeable and fertile, that some have called it a *Terrestrial Paradise*. The fourth is covered with snow, and uninhabited, by reason of its cold. Its cedars have been remarkable from the days of Solomon. But 16 aged ones remain. One of them is thirty six feet six inches in circumference, and the spread of its branches proportionably extensive.

The Anti-Libanus is a short detached chain, running nearly parallel on the east. These mountains are of considerable height, the summits being often covered with snow ; and they seem to be calcareous, the granite not appearing till in the neighborhood of mount Sinai and the Arabian gulf. The chief heights are between Balbec and Damascus.

The eastern side of the Archipelago presents many mountains of great height and classical fame, chiefly in ranges extending from N. to S. Of these Olympus (now Keshik Dag) is one of the most celebrated, and is described by Tournefort, as a vast range covered with perpetual snow. Many small streams spring from Olympus, and the large lake of Ullabad is another receptacle of its waters.

About 140 miles west of Olympus rises mount Ida, of great though not equal height. The summit of Ida was by the ancients called Garganus ; from which extend western prominences reaching to the Hellespont, and amidst them stood the celebrated city of Troy : Garganus, or the summit of Ida, being about 30 miles from the shore ; and giving source to the Granicus, the Simois, and other noted streams, most of which run to the north.

South of the Minder, or Mæander, the Taurus detaches a chain, called Cadmus and Grius, bending towards the isle of Cos and the Cyclades.

Forests.] The numerous mountains in Asiatic Turkey are often clothed with immense forests of pines, oaks, beeches, elms, and other trees. The southern shores of the Black Sea also present many gloomy forests of great extent. The abundance of timber supplies the inhabitants with fuel; nor has pit coal been explored in any part of Asiatic Turkey.

Botany.] The extensive provinces of Natolia, Syria, and Mesopotamia, since their reduction under the Turkish yoke, have been but little accessible to European curiosity. The natural productions of Syria, however, have been investigated, though imperfectly, by several naturalists of eminence, while the mountains and rich vales of Natolia, towards the great Caucasian chain, are almost wholly unknown. These countries having been inhabited and civilized from the remotest antiquity, possessing for the most part a dry rocky soil, with fewer rivers than any tract in Europe of equal extent, contain none of those low swampy levels that form so characteristic a feature in almost all the American countries, that compose the greater part of Holland, and occupy no small proportion of Hungary, and the dominions north of the Baltic. Those vegetables, therefore, that grow in swamps, lakes, and bogs, will be very sparingly found in the flora of Asiatic Turkey; nor will the indigenous alpine plants be more numerous, not indeed on account of the absence of high mountains, but from their having been hitherto almost entirely unexamined. Of the scanty catalogue of plants that have been found wild in the Asiatic part of the Ottoman territory, the following are the most worthy of notice.

Among the trees may be distinguished, the olive tree, abounding throughout the whole Archipelago and the shores of the Levant; the weeping willow, which has adorned the banks of the Euphrates from time immemorial; the wild olive, bearing a small sweet esculent fruit; the white mulberry; the storax tree, from which exudes the fragrant gum resin of the same name, the pomegranate; almond tree, and peach tree; the cherry, a native of Pontus in Natolia, whence it was brought to Rome by Lucullus; the lemon and orange; the myrtle, growing plentifully by the side of running streams; the plantain tree; the vine, in a perfectly wild state climbing up the highest trees, and forming verdant grottos among its ample festoons: the mastich, chio turpentine, and pistachia nut tree; the cypress, the cedar; a few large trees of which still remain on Mount Lebanon, the venerable relics of its sacred forests. Hibiscus Syriacus, distinguished by the uncommon splendor of its blossoms, and on this account much cultivated about Constantinople, and other parts of the Turkish empire, where it does not grow spontaneously; the fig tree, and sycamore fig, abounding in Palestine and other parts of Syria; the date tree, the prickly cupped oak, from which are procured the finest Aleppo galls; the oriental plane tree, highly esteemed for

its shady tent-like canopy of foliage ; and *menispermum cocc ulus*, the berries of which, commonly called *cocculus indicus*, are much used by the natives for taking fish, on account of their narcotic qualities.

Of the lower trees and flowering shrubs the principal are the lilac, abounding on the banks of the Euphrates ; the yellow and common jasmine, found plentifully in the thickets and woods of Syria ; the long hollow stems of the latter of these are in great request among the inhabitants, as stems to their tobacco pipes ; the Spanish and thorny broom, occupying many of the sandy tracts that are of such frequent occurrence in Syria, and the oleander, a common ornament of every rivulet.

Several dying drugs and articles of the *materia medica* are imported from the Levant, among which may be particularized madder ; a variety of this called *alizari*, is largely cultivated around Smyrna, which yields a much finer red dye than the European kind, and to this the superiority of the Greek and Turkish reds is in part to be ascribed ; jalap, scammony, sebesten, croton tinctorium ; ricinus communis, the seed of which yields by expression the castor oil ; squirting cucumber, *coloquintida* ; opium poppy, and spikenard.

A few esculent plants not commonly made use of elsewhere, are the produce of Natolia and Syria, such as the mad apple, Jew's mallow, and arum colocasia, remarkable for its sweet farinaceous root, while those of its kindred species are intolerably acrid.

Zoology.] The best horses in Asiatic Turkey are of Arabian extract, and are sparingly fed with a little barley and minced straw, to accustom them to abstinence and fatigue ; but mules and asses are in more general use. Concerning the breed of cattle, little is mentioned by travellers, but it seems inferior to those of Europe ; and beef is scarce and bad. The mutton is superior ; and the kid is a favorite repast.

In Asiatic Turkey appears that king of ferocious animals the lion, which is unknown to any region of Europe, and even to Asiatic Russia. Yet he rarely roams to the west of the Euphrates ; but Tournefort observed many tigers on Mount Ararat. He must mean the small tiger, or perhaps the leopard ; for the royal or large tiger seems to be restricted to the wastes of Hindostan. The hyena, and the wild boar, are known animals of Asia Minor, together with troops of jackals, which raise dreadful cries in the night. The cities and villages swarm with dogs, who are allowed to wander, as a constant defence against strangers or enemies.

The ibex, or rock goat, appears on the summits of Caucasus. The singular goats and cats of Angora have been already mentioned. The common antelope is also an inhabitant of Asia Minor, with numerous deer and hares. The partridges are generally of the red legged kind, about a third larger than the common European.

Mineralogy.] The mineralogy of those extensive and mountainous provinces remains in a deplorable state of imperfection.

Ancient Lydia was famous for the production of gold ; but in modern times no mines seem to be indicated, except those of copper, which supply Tokat ; lead, and copper ore, with rock crystals, have been observed in the island of Cyprus. The mountains of Judea, according to Haselquist, are of a very hard limestone, of a yellowish white ; and towards the east of a loose grey limestone.

Mineral Waters.] The most noted mineral waters are those of Prusa, at the bottom of Mount Olympus. The baths are splendid, and paved with marble, with two reservoirs or rather cisterns for bathing, one for the men, another for the women. The water smokes continually, and is so hot as to scald the hand ; but in the baths it is mingled with cold water from the numerous streams of Olympus. There are many other hot springs in different quarters of Natolia.

ISLANDS BELONGING TO ASIATIC TURKEY.

The chief islands in the Archipelago, considered as belonging to Asia, are Mytilene, Scio, Samos, Cos, and Rhodes.

Mytilene, the ancient Lesbos, is the most northerly and largest of these isles, being about 40 miles in length, by 24 at its greatest breadth. Its population is upwards of 100,000. The mountainous appearance of this isle is agreeably diversified with bays and inlets of the sea, and plantations of olives, vines, and myrtle.* There are hot baths issuing from cliffs resembling those of St. Vincent, near Bristol, and which indicate the isle to be chiefly calcareous. The climate is exquisite ; and it was anciently noted for wines, and the beauty of the women.

Scio, the ancient Chios, is about 36 miles in length, by about 13 in medial breadth. The Chian wine is celebrated by Horace, and retains its ancient fame. The town of Scio, on the east side of the isle, is handsome and convenient. The Greeks here enjoy considerable freedom and ease ; and display such industry, that the country resembles a garden. This particular favor arises from the cultivation of the mastic trees, or rather shrubs, for they are small evergreens, which supply the gum so acceptable to the ladies of the sultan's haram, or, as we term it, the seraglio. The whole isle is mountainous. Tournefort observed here tame partridges, kept like poultry ; and Chandler saw numerous groves of lemons, oranges, and citrons, perfuming the air with the odour of their blossoms, and delighting the eye with their golden fruit. The Genoese possessed this beautiful isle about 240 years, but lost it in 1566. Opposite to Scio, on the Asiatic shore, is Chesm , where the Turkish fleet was destroyed by the Russians, 1770. The inhabitants of Scio are supposed to be about 60,000.†

Samos is about 30 miles in length, and 10 in breadth. This isle

* Dallaway's Constantinople, p. 513.

† Tournefort, p. 281. Van Egmont, i. 237, &c. Chandler, 48.

is also crossed by a chain of hills, and the most agreeable part is the plain of Cora. Tournefort computes the inhabitants at 12,000, all Greeks, with a Turkish Aga, or military officer, and a cadi, or judge. The pottery of Samos was anciently excellent; but at present most branches of industry are neglected. Pitch is prepared from the pine trees in the north part of the island, and the silk, honey, and wax are esteemed. Most of the mountains are of white marble, and swarm with game of various descriptions. The best haven is that of Vati to the N. W. Some remains are observed of the celebrated temple of Juno.*

Cos, or Coos, is about 24 miles in length, by 3 or 4 in breadth; but has been little visited by modern travellers. Pliny styles Cos a most noble isle; and from it was first derived the name and substance of the whetstone. It is now covered with groves of lemon trees, and there is an oriental plane tree of vast size. The chief trade is in oranges and lemons; and Cos is the residence of a Turkish Pasha.†

Rhodes is about 36 miles in length, by 15 in breadth, an island celebrated in ancient and modern times. It is fertile in wheat, though the soil be of a sandy nature. The population is computed at about 40,000. The city of the same name, in which no Christian is now permitted to dwell, stands in the north end of the isle; and was anciently noted for a colossus in bronze, about 130 feet high. This isle was for two centuries possessed by the knights of St. John of Jerusalem, thence styled of Rhodes, till 1523, when it was taken by the Turks; and the emperor Charles V. assigned to the knights the island of Malta.‡

Along the southern shore of Asia Minor there are some small isles, among which is that of Castel Rosso, S. E. of Patira. But they are of no moment when compared with the large and celebrated island of Cyprus, which is about 160 miles in length, and about 70 at its greatest breadth. It was long possessed by the Ptolemies of Egypt, till it fell under the Roman power; when it remained a portion of the Byzantine empire, till it was usurped by a Greek prince, who was expelled by Richard I. of England. This monarch bestowed the kingdom of Cyprus on the house of Lusignan, as a compensation for the loss of the throne of Jerusalem. In the 15th century the heiress of the house of Lusignan resigned this isle to the Venetians; but in 1570 it was seized by the Turks. The soil is fertile, yet agriculture is in a neglected state. The chief products are silk, cotton, wines, turpentine, and timber. The wine of Cyprus is deservedly celebrated. The oranges are excellent; and the mountains are covered with hyacinths and anemones, and other beautiful flowers. Cyprus is supposed to have derived its name from the abundance of copper ore; and it is said to have anciently produced gold, silver, and emeralds. What is called the Paphian diamond is a rock crystal,

* Tournefort, i. 307. Dallaway, 251.

† Van Egmont, i. 262.

‡ Ib. i. 268, who gives a long description of Rhodes.

found near Paphos ; and there is a quarry of amianthus, while several hills consist chiefly of talc. The other mineral productions are red jasper, agates, and umber. The Cypriots are a tall and elegant race ; but the chief beauty of the women consists in their sparkling eyes. To the disgrace of the Turkish government, the population of this extensive island is computed at 50,000 souls ! Cyprus is pervaded by a chain of mountains, among which is a third *Olympus*, some primitive name, which seems to have been general for a mountain of great height. There is not one river in the island, that continues its course in the summer ; but there are many ponds, lakes, and fens, producing a damp and malignant air. The chief cities are Nicosia, the capital and residence of the governor, and Famagusta.*

RUSSIAN EMPIRE IN ASIA.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, BOUNDARIES, DIVISIONS, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS AND ANTIQUITIES, RELIGION, ECCLESIASTICAL GEOGRAPHY, GOVERNMENT, LAWS, POPULATION, COLONIES, ARMY, NAVY, REVENUES, POLITICAL IMPORTANCE AND RELATIONS, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, CITIES AND TOWNS, MANUFACTURES AND COMMERCE.

Extent.] ASIATIC Russia extends between the 57th and the 190th degrees of east longitude from London, computed at 4570 miles in length. Its greatest breadth, from the Altaian chain of mountains, on the south, to the Cape of Faimura on the north, 28 degrees of latitude, is 1960 miles.

Boundaries.] East by a part of Asia, and the seas of Kamchatka and Ochotsk ; north by the Arctic ocean ; west the frontiers correspond with those between Asia and Europe. The southern limits require more explanation. The river Cuban, part of the Caucasian chain, and an ideal line, divide the Russian territory from Turkey and Persia. The boundary then ascends along the north of the Caspian, through the *steph*, or desert of Issim, and the eastern shore of the river Ob, to where it issues from the Altaian mountains, when it meets the vast empire of China ; and proceeds along that chain to the sources of the Onon, where it includes a considerable region, called Daouria, extending about 200

* Van Egmont, i. 281. Mariti, &c.

miles in breadth, to the south of the mountains called Yablonny ; the limit between Russia and Chinese Tartary being partly an ideal line ; and partly the river Argoon, which joined with the Onon constitutes the great river Amur. Thence the boundary returns to the mountainous chain, and follows a branch of it to a promontory on the north of the mouth of the Amur, or Amoor.

Divisions.] These have been already given.*

Original Population.] The population of Asiatic Russia may be regarded as wholly primitive, except a few Russian colonies recently planted, and the Techuks in the part opposite to America, who are supposed to have proceeded from that continent, because their persons and customs are different from those of the other Asiatic tribes. Next to the Techuks, in the farthest north, are the Yukagirs, a branch of the Yakuts, and yet farther west the Samoides. To the south of the Techuks are the Coriaks, a branch of the same race ; and yet farther south the Kamchadals, a distinct people, who speak a different language. The Lamuts are a part of the Mandshurs, or Tunguses, who have been vaguely called Tartars or Tatars, though they neither belong to that race nor to the Monguls. The Tunguses are widely diffused between the Yenisei and the Amur ; and the southern tribes ruled by a khan, or monarch, conquered China in the 17th century. The Ostiaks, and other tribes of Samoides have penetrated considerably to the south between the Yenisei and the Irtish, and are followed by various tribes of the Monguls, as the Calmucs, Burats, &c. and by those of the Tartars, or Huns, as the Teluts, Kirguses, and others. The radically distinct languages amount to seven, independent of many dialects and mixtures.†

Names.] The vast extent of northern Asia was first known by the name of Sibir, or Siberia ; but this appellation seems to be gradually passing into disuse. When the Monguls established a kingdom in these northern regions, the first residence of the princes was on the river Tura, on the spot where now stands the town of Tiumen, about 180 miles S. W. of Tobolsk.‡ But the khans afterwards removed to the eastern shore of the Irtish, where they founded the city of Isker, near Tobolsk. This new residence was also called Sibir, and the name of the city passed to the Mongul principality. When the Russians began the conquest of the country, being unconscious of its extent, the name of this western province was gradually diffused over half of Asia.

Progressive Geography.] The progressive geography of this vast part of Asia commences at a recent period : nor was it disclosed to the attention of civilized Europe till the middle of the 16th century. It is indeed a singular circumstance in human affairs, that America may be said to have been discovered before Asia, though it be natural to suppose that the latter would have engaged

* See p. 187, 188.

† See the Hist. des Découvertes Russes, &c.; Berne, 1779, 1787; 6 vols. 8vo.; being an abstract of the Travels of Pallas, Gimelin, Ghiorghi, &c.

‡ Tooke's Russia, ii. 60.

a more deep and immediate interest, because the barbarous swarms, in the extremity of Asia, had repeatedly astonished, and almost subjugated Europe. It has already been mentioned, that in 1242 the Monguls, under Sheibani, established a principality in the western part of Siberia, around Tobolsk, and the river Tura, whence this principality was sometimes styled that of Turan.* The history of this distant principality is obscure, and lost in the superior splendor of the other Mongul dynasties.

In the reign of Ivan Vasilivitch, by his conquest over the Tartars, esteemed the founder of Russian greatness, some incursions were made as far as the river Ob, and some Mongul chiefs were brought prisoners to Moscow ;† but more than half a century elapsed before the real conquest of Siberia commenced, in the reign of Ivan Vasilivitch III. who ascended the Russian throne in 1534. Trogonaff, a Russian merchant of Archangel, having opened a traffic for Siberian furs, the tsar was induced to attempt the conquest of the country which supplied them, and in 1588 had added to his titles that of lord of Siberia. It was not however till the beginning of the 17th century that they had firm establishments, and one Cyprian was appointed first archbishop of Siberia, in 1621, residing at Tobolsk, where he drew up a narrative of the conquest. Towards the middle of the 17th century the Russians had extended as far east as the river Amur ; but Kamchatka was not finally reduced till the year 1711. Beering, and after him other navigators, proceeded to discover the other extreme parts of Asia. In his first voyage, of 1728, Beering coasted the eastern shore of Siberia, as high as lat. 67° 18', but his most important discoveries were made during his voyage of 1741. The Aleutian isles were visited in 1745 ; and in the reign of the late Empress, other important discoveries followed, which were completed by those of Cook.

In the south, the Mongul kingdom of Cazan having been subdued in 1552, and that of Astracan in 1554, and the Russian monarchy extended to the Caspian sea, a considerable accession was made to the progressive geography by the chart of that sea drawn by command of Peter the Great. It hence appeared that all geographers, ancient and modern, had mistaken the very form of the Caspian, which extends greatly from north to south, instead of spreading from east to west, as formerly delineated. In the reign of the late Empress, many important additions were made to the progressive geography, by Pallas, Beneyowski, and other scientific travellers, and a Russian atlas was published, which may be regarded as nearly complete.

Historical Epochs.] The Russian power in Asia is of such recent origin, that it affords few historical epochs, except those which have been already mentioned in the progressive geography. The city of Kazan was built in 1257, and became the capital of a small independent Mongul principality, partly in Europe, and partly in

* This must not be confounded with the Touran (or Tartary) of the Persians.

† Coxe's Russ. Dis. p. 177.

Asia, A. D. 1441. The acquisitions on the frontiers of Turkey and Persia are recent and well known events.

As the Russian empire in Asia borders to a great extent, upon Chinese Tatary, or rather the Monguls and Mandshurs, who acknowledge the protection and supremacy of China, it may be proper here to commemorate a few events, which have arisen from this proximity. About the middle of the 17th century the Russians had advanced to the river Amur ; here they subdued some Tungusian tribes, and built some small fortresses. The Chinese monarch, Camhi, having formed a similar design, the two great powers unavoidably clashed ; open hostilities commenced about 1680, and the Chinese destroyed the Russian forts. In August 1689, the treaty of Nershinsk, was signed by the Russian and Chinese plenipotentiaries, and the limits specified, were a chain of mountains far to the north of the Amur, and the source of the small river Gorbitza, thence to where that river joins the Amur, and lastly along the Argoon, or Argounia, &c.* By this treaty the Russians assert that they not only lost a wide territory, but also the navigation of the river Amur, which would have been of great consequence to their remote possessions in Asia ; yet the advantage was gained of a commercial intercourse with the Chinese. In 1727, the limits were continued westward, from the source of the Argoon, to the mountain Sabyntaban, near the conflux of two rivers with the Yenesei ; the boundary being thus ascertained between the Russians and the Monguls subject to China. The trade with China has been latterly conducted at Zurchaitu, on the river Argoon, lat. 50, lon. 117, and at Kiachta, about 90 miles S. of the sea of Baikal, lat. 51, lon. 106. This boundary between two states is the most extensive of any on the globe, reaching from about the 65th to the 145th degree of longitude ; eighty degrees (latitude fifty) computed at 39 geographical miles, will yield the result of 3120 miles. Its history, therefore, becomes singular and interesting.

Antiquities.] The most curious antiquities seem to be the stone tombs which abound in some steppes, particularly near the river Yenesei, representing in rude sculpture human faces, camels, horsemen with lances, and other objects. Here are found besides human bones those of horses and oxen, with fragments of pottery and ornaments of dress.†

Religion.] The Grecian system of the Christian faith, which is embraced by the Russians, has made inconsiderable progress in their Asiatic possessions. Many of the Tartar tribes in the S. W. are Mahometans ; and others follow the superstition of Dalab Lama, of which an account shall be given in the description of the Chinese empire. But the more eastern Tartars are generally of the Shaman religion, a system chiefly founded on the self-existence of matter, a spiritual world, and the general restitution of all things.‡ The Shamanians believe that even the Burchans, or

* Coxe, 220. Du Halde, iv.
† Took's Russia, 1783, iv. 42.

‡ Dec. Russ. vi. 210.

gods themselves, arose from the general mass of matter and spirit. Their epochs of destruction and restitution somewhat resemble those of the Hindoos. While common souls immediately receive their final decree, the virtuous become chubils, or wandering spirits, who are purified by transmigration, so as also to become Burchans, or gods. Between men and gods are the Tengri, or spirits of the air, who direct sublunary affairs, and all the trifles so important to man, but beneath the most remote attention of the gods. The infernal regions chiefly contain those who have offended the priesthood. This system is intimately connected with that of the Dalai Lama, and is so widely diffused, that some have asserted Shamanism to be the most prevalent system on the globe. In Asiatic Russia it is professed by most nations, as a great part of the Tartars, with the Fins, Samoieds, and Ostiaks, the Mandshurs, and Burats, and Tunguses; and has even passed to the Coriaks and Techuks, and people of the eastern isles.*

The archiepiscopal see of Tobolsk is the metropolitan of Russian Asia in the north, and that of Astracan in the south. There is another see, that of Irkutsk and Nershink, and perhaps a few others of recent foundation.

At Karrass, 530 miles S. W. of Astracan, and 260 N. of Tifflis, is a missionary station, supported by a missionary society at Edinburgh. The Mohammedan religion prevails in this region, to a great extent. The missionaries have been patronized by the Russian government, and their labors have been successful. Mr. Brunton, one of the missionaries on this station, is engaged in translating the Scriptures into the Turkish language, which is understood by all the Tartars, who can read, from the banks of the Wolga, to the shores of the Euxine, and is also spoken over many extensive and populous regions in the east. Types and paper have been sent to the amount of £600 sterling to this station, by the British and Foreign Bible Society, in aid of this benevolent object, and the New Testament has been already published, and is read with interest by some of the most learned Mohammedans. This station is not far distant from the *Sonnas*, in the Caucasian mountains, already noticed,† and who, in connexion with this mission, may be of essential service in spreading the knowledge of the Gospel through the neighboring countries.

Government.] Siberia is divided into two great governments, that of Tebolsk in the west, and Irkutsk in the east. The smaller provinces are Kolivan, Nershinsk, Yakutsk, and Ochotsk. In the S. W. is the government of Caucasus, with one or two other divisions, intermingling Europe and Asia. At a distance from the capital the government becomes proportionably lax, and tribute is the chief mark of subjection.

Population.] The population of Siberia, according to Tooke, cannot be computed at above three millions and a half. Small Russian colonies have been established in several of the distant provinces and isles. The political importance and relations of this part of the Russian empire chiefly relate to China and Japan.

* Tooke's Russia, iii.

† P. 442.

Manners and Customs.] The manners and customs of Asiatic Russia vary with the numerous tribes by whom that extensive region is peopled. The Tartars, properly so called, are the most numerous, not only remaining in their ancient kingdom of Siberia, but constituting many other tribes in the west, as the Nogays, the Kirguses or Kaizaks, the Bashkirs, and other tribes, as far as the sources of the river Ob. Next in importance are the Monguls, of whom one tribe, the Kalmuks, are found to the west of the Caspian ; while the others, called Burats, Tonguts, &c. are chiefly around the sea of Baikal. Yet farther to the east, are the Mandshurs, or Tunguses. Such are the three radically distinct divisions of men, whom former European ignorance classed under the general name of Tartars, or Tatars.

The manners of the Tartars, who are the same people with the Huns of antiquity, are minutely described by those authors who have delineated the fall of the Roman empire. It would be superfluous to enter into a detail of the manners and customs of the various nations in Asiatic Russia, for which the reader may be referred to the works of Pallas, Tooke, and others. The manners of the Monguls may be chosen as a specimen. Those of the Russian empire are wholly Nomadic, their herds consisting of horses, camels, oxen, sheep, and goats. The women tan leather, dig the culinary roots, prepare the winter provisions, dried or salted, and distil the spirit of mare's milk. The men hunt the numerous beasts and game that roam through the vast wilds. Their tents are formed of a kind of felt, and in some parts they erect little temples, and the priests have also wooden hovels around the temples. The Kalmuks are divided into three ranks : the nobility, whom they call white bones ; the common people, who are bondmen, and termed black bones ; and the clergy, descending from both, who are free.* In like manner the noble ladies are called white flesh, and the common people black flesh, but the pedigrees are only reckoned by the bones. The power of the *Tuidsha*, or chief prince, consists solely in the number and opulence of his subjects, territory being of no estimation in so wide a region. These subjects form an *Oluus*, divided into *Imaks*, from 150 to 300 families, each *Imak* being commanded by a *Saissan*, or noble. If there be a great khan, or emperor, the princes are only guided by him in affairs of general importance. The tribute is about a tenth part of the cattle and other property ; but on the first summons every man must appear on horseback before the prince, who dismisses those who are unfit for the fatigues of war. The weapons are bows, lances, and sabres, and sometimes fire-arms ; and the rich warriors are clothed in mail of interwoven rings, like that used in Europe till the 15th century. But they cannot oppose regular armies, and are apt even to throw into disorder those of their allies.

The Monguls are rather short in stature, with a flat visage, small oblique eyes, thick lips, and a short chin, with a scanty

* Tooke, iv. 1.

beard ; the hair black, and the complexion of a reddish or yellowish brown ; but that of the women is clear, and of a healthy white and red. They have surprising quickness of sight and apprehension, and are docile, hospitable, beneficent, active, and voluptuous. Industry is a virtue entirely female, yet great, and accompanied with perpetual cheerfulness. Their religious books are in the dialect of Tangut, or Tibet, and there is a schoolmaster in every imak. Animal food is abundant, and sometimes mixed with vegetable, while the general drink is water ; but they sometimes indulge in sour milk, prepared after the Tartarian manner, butter-milk, and koumiss ; but mead and brandy are now greater favorites. When pasturage begins to fail, all the tribes strike their tents, generally from ten to fifteen times in the year, proceeding in the summer to the northern, and in the winter to the southern wilds. The herds, men, women, and children, form a regular procession, and are followed by the girls, singing with harmony and spirit. The amusements of these jovial wanderers consist in running races on horseback, in which even the girls excel ; archery, wrestling, pantomime, dances, and the songs of the young women, generally accompanied by the lute, viol, and pipe, the themes of their ditties being gigantic tales of chivalry, and amorous adventures and sentiments, but the sound is harsh and dismal. Cards are not unknown, but chess is the favorite game. Such, with some slight shades of difference, are also the manners of the Tartars and Mandshurs.

The three distinct barbaric nations of Tartars, Monguls, and Tunguses, or Mandshurs, are by far the most interesting in these middle regions of Asia, as their ancestors have overturned the greatest empires, and repeatedly influenced the destiny of half the globe. The vague name of Tartary is nearly discarded from our maps, and might yield with far greater precision to names derived from the seats of the chief nations, as Tungusia, or Mandshuria, in the east, Mongolia in the centre, and Tartaria in the west. Of these the Monguls are the chief people, and the account already given of their manners will suffice to impart an idea of the ethical condition of Asiatic Russia.

Language.] The languages of all these original nations are radically different ; and among the Tunguses, Monguls, and Tartars, there are some slight traces of literature ; and not a few manuscripts in their several languages. The history of the Tartars, by Abulgasi, is a favorable specimen of Tartaric composition. The late emperor of China ordered many of the best Chinese works to be translated into the Mandshur language, which, having an alphabet, may be more easily acquired than the original. In the Mongul language there are also many books, written in the various countries to which their wide conquests extended. Superior, even amid their barbarism, to the chief original nations of Africa and America, the central races of Asia deserve an attention, which has been lavished upon inferior objects.

Cities and Towns.] In Asiatic Russia, the principal city is Astracan, at the mouth of the Volga, which is supposed to contain

70,000 inhabitants. This city was founded by the Monguls of Kipschak. In 1554 the Monguls were expelled. Astracan is built on several small hills, that rise amid the meadows of the Volga. The fortress on the west is triangular, but the walls of the city are neglected. The wooden houses have exposed it to frequent conflagrations, and attempts have been vainly made to enforce the use of brick. Vines are cultivated in the neighborhood, and other fruits abound. There are 25 Russian churches, and 2 convents. The Armenians, Lutherans, and Papists, have also their places of worship ; and even the Hindoos have been permitted to erect a temple.* The chief trade of Astracan is in salt and fish, particularly sturgeon and kaviar, from the Volga ; and it also attracts some portion of oriental commerce. The fishery on the Caspian, which centers at Astracan, is esteemed of the utmost consequence to the empire.

Azof, on the Asiatic side of the Don, is of small importance, except as a fortified post. The chief towns on the Asiatic side of the Volga are Samara and Stauropol. At the mouth of the river Ural, or Jaik, stands Gurief ; but the chief place after Astracan is Orenburg, founded in the year 1740, to protect the acquisitions in these parts, and promote their commerce. Nor have these views failed, for Orenburg is the seat of a considerable trade with the tribes on the east of the Caspian.

On passing the Uralian chain, first occurs the city of Tobolsk, which contains only about 15,000 souls ; but is esteemed the capital of Siberia. Being mostly built of wood, it was nearly consumed by a destructive fire, about 1786 ; but, it is believed, is now rebuilt, chiefly of stone. Tobolsk is more distinguished as the residence of the governor and archbishop, than for the importance of its commerce. The upper town stands on a hill, on the east side of the Irtish, and contains a stone fortress of some strength. Indian goods are brought hither by Kalmuck and Bucharian merchants, and provisions are cheap and plentiful.

Kolyvan is a town of some consequence, on the river Ob. In the neighborhood there are silver mines of considerable produce. To the north of Kolyvan is Tomsk, said to contain about 8000 souls.

Farther east the towns become of less consequence, but a village attracts attention, when situated in a desert. On the river Yenisei, is a small town of the same name, and another called Sayansk, whence the adjacent part of the Altaian chain is called the mountains of Sayansk.

On the river Angara, which issues from the sea of Baikal, stands Irkutsk, supposed to contain 12,000 inhabitants. There are several churches and other edifices of stone, and the wooden houses are large and convenient. Irkutsk is the chief mart of the commerce between Russia and China, the see of an archbishop, and the seat of supreme jurisdiction over eastern Siberia.† The numerous officers and magistrates have introduced the customs and

* Tooke's Russia, iv. 341.

† Lesseps, ii. 344.

fashions of Petersburg, and European equipages are not uncommon in this distant region.

On the wide and frozen Lena, stands Yakutsk, with some stone churches; but the houses are mostly of wood, and inhabited chiefly by Russians, as the Yakuts are fond of a wandering life. The Lena is here about two leagues in width, (though about 700 miles from its mouth) but is greatly impeded with ice; and there are only a few small barks, chiefly employed in supplying the town with provisions. Ochotsk, on the sea of the same name, may be rather regarded as a station than a town.

Manufactures.] There are some manufactures, particularly in leather, at Astracan; and salt is prepared there, and in several other places in Asiatic Russia. Isinglass is chiefly manufactured on the shores of the Caspian, from the sounds or air bladder of the sturgeon, and the beluga. Kaviar is the salted roe of large fish. There is a considerable manufacture of nitre, about 40 miles north of Astracan. The Tartars and Bashkirs make felts of a large size, some of which are exported. The Russia leather is chiefly fabricated in the European provinces, being tanned with willow bark, and afterwards stained. Shagreen is prepared from the hides of horses or asses, but only a particular part of the back is fit for this purpose; and the grain is given with the hard seeds of the greater orach, prest into the leather while moist.* Pitch is made by the boors from the pines of Siberia. Near the Uralian mountains are several manufactures in iron and copper.

Commerce.] The chief commerce of this part of the Russian empire consists in sables, and other valuable furs, which are eagerly bought by the Chinese, who return tea, silk, and porcelain: that with the Kirguses is carried on by exchanging Russian woolen cloths, iron, and household articles, for horses, cattle, sheep, and beautiful sheep-skins. On the Black Sea there is some commerce with Turkey, the exports being furs, kaviar, iron, linen, &c. and the imports wine, fruit, coffee, silks, rice. In the trade on the Caspian, the exports are the same, but the return chiefly silk. The principal Russian harbors are Astracan, Gurief, and Kisliur, near the mouth of the Terek, but the best haven is Baku, belonging to the Persians. The Tartars, on the east of the Caspian, bring the products of their country, and of Bucharia, as cotton yarn, furs, stuffs, hides, rhubarb; but the chief article is raw silk from Shirvan and Ghilan, on the west of the Caspian.

* Tooke's View, iii. 531.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS.

Climate and Seasons.] IN Asiatic Russia the climate extends from the vine at the bottom of Caucasus, to the solitary lichen, on the rocks of the Arctic ocean. Through the greater part of Siberia, the most southern frontier being about 50, while the northern ascends to 78. The general climate may more justly be regarded as frigid than temperate ; being, in three quarters of the country, on a level with that of Norway and Lapland, unsoftened by the gales of the Atlantic. To the south of the sea of Baikal, the climate parallels that of Berlin and the north of Germany, so that the finest and most fertile regions in middle Asia belong to the Chinese. The chains of high mountains, which form the southern boundary of these provinces, also contribute to increase the cold ; and the sea of Baikal is commonly entirely frozen from December till May. The finest climate in these eastern parts is that of Daouria, or the province around Nershinsk ; and the numerous towns on the Amur evince the great superiority of what is called Chinese Tartary, which is comparatively a fertile and temperate region. The change of the seasons is very rapid ; the long winter is almost instantaneously succeeded by a warm spring, and the quickness and luxuriance of the vegetation exceed description.

Face of the Country.] In a general view of Asiatic Russia, the northern and eastern parts present vast marshy plains, covered with almost perpetual snow, and pervaded by enormous rivers, which, under masses of ice, pursue their dreary way to the Arctic ocean. Even the central parts of Siberia seem destitute of trees, vegetation being checked by the severe cold of so wide a continent. Towards the south there are vast forests. The sublime scenes around the sea of Baikal are agreeably contrasted with the marks of human industry, the cultivated field and the garden.* Even in the south the rivers have already acquired the size of the Danube and the Rhine, and they are navigable with safety for a great extent. The vast plains, called *stepies*, constitute a feature almost peculiar to Asia ; but the mountains do not correspond in dignity, rather resembling the Apennines, than the Andes, the Alps, or even the Pyrenees.

Soil and Agriculture.] Many parts of Siberia are totally incapable of agriculture ; but in the southern and western districts the soil is of remarkable fertility. Toward the north of Kolyvan

* See Bell's animated description of this region.

barley generally yields more than twelve fold, and oats commonly twenty fold. Buck wheat, in this black light mould, is apt to run into stalk, but sown in the poorest spots yields from twelve to fifteen fold. Exclusive of winter wheat, most of the usual European grains prosper in southern Siberia. The culture of the olive tree has been attempted near Astracan, and the heat of the summer was sufficient, but the winter cold too severe. The best rhubarb abounds on the banks of the Ural, or Jaik, in the southern districts watered by the Yenesei, and in the mountains of Daouria.

But in no part of the Russian empire has agriculture made much progress, nor indeed is it possible, while the peasantry are slaves, and sold with the soil.

Rivers.] Some of the largest rivers of Asia belong to the Russian empire, nearly equalling in the length of their course any others on the globe. Of these the principal are the Oby, the Yenesei, the Lena, the Amur, and the Wolga, which have been already described.*

The Selinga is a noble river, farther to the south, which flows into the sea of Baikal, after receiving the Orchon and other rivers, among which is the Tula, or Tola, the last stream that occurs till the wide desert be passed, which here divides the Russian empire from China Proper. The territory adjacent to the Selinga and the Onon is the most interesting in Siberia, abounding with new, and properly Asiatic botany, and zoology.

The Yaik is a considerable stream which flows into the Caspian : the name was recently changed for that of Ural, on account of a daring insurrection of the tribes bordering on the Yaik.† The Terek also joins the Caspian on the west, and its chief consequence is derived from the fertility of its shores. The Kuban, or Cuban, the ancient Hypanis, runs in an opposite direction into the Euxine. The lower shores are plain, and destitute of wood ; near the sources are large forests.

Towards the other extremity of Asiatic Russia is the Anadir, which pervades the country of the Techuks. The long course of the Amur belongs to the Chinese dominions. The Argoon may be properly considered as the original Amur, while the Onon, called also the Schilka, which is regarded as another source of that great river, may be considered as entirely Russian. The course of the Onon is about 500 miles ; and it receives numerous streams from mountains on the N. and S.

Lakes.] In the north of Siberia, the most considerable lake is that of Piazinsko. In the south the sea of Baikal is fresh, but the extent far exceeding that of any other lake ; it has been described, with the Caspian, among the inland seas of Asia.‡ Between the river Ob and the Irtish is a large lake, about half the length of the Baikal, or 170 miles in length, divided by an island into two parts, called the lakes of Tchany and Soumi. In this quarter there are

* See p. 17, &c.

† This river alone rises on the E. of the Ural mountains, and afterwards pierces the granitic chain, and passes W. Dec. Russ. iv. 309.

‡ P. 16.

many smaller lakes, and others north of the Caspian, some of which are salt, particularly that of Bogdo, near the small mountain of this name.

The Altan Nor, or golden lake, sometimes corruptly called Elton, is a large saline lake, on the E. of Zaritzin. The lake of Altin, already mentioned in the account of the river Ob,* is called by the Russians Teletzko, and is considerably elevated on the north side of the Altaian mountains; but from the best maps is not above 40 miles in length, and 20 in breadth.

Mountains.] The Uralian and Altaian mountains have been already described.†

The mountains of Nershinsk, or Russian Daouria, send branches towards the Selinga, and the Amur. The chief heights are towards the sources of the Onon and Ingoda, where there are precipitous summits of granite. A ridge passing S. W. and N. E. to the south of Nershinsk, between the rivers Onon and Argoon (the last of which is the real Amur; or Amoor), is the most fertile in minerals of all Asiatic Russia. Among the products may be named granite, porphyry, jasper, calcedony, carnelian, onyx, large smoky topazes, beryl, or aqua-marine, the real topaz, and the jacin. In this opulent district are also salt lakes, and warm springs, with vitriolic pyrites, ores of alum, native sulphur, and coals. The metals are zinc, iron, copper, and many mines of lead ore, containing silver and gold. The zoology and botany are alike curious and interesting.‡

The chain of Stanovi, otherwise called the mountains of Ochotsk, is only a continuation of the mountains of Daouria. This part has been little explored; but produces nearly the same substances as the former. A great singularity of this ridge is, that some entire branches consist of beautiful red and green jasper. That branch which pervades Kamchatka is little known, being covered with perpetual ice and snow. It abounds with volcanoes.

This grand chain contains almost the whole mountains of Siberia, the remainder of the land on the W. of the Yenesei being level; and to the E. of that river are only several long ranges extending from the S. to the N.

But in the S. W. part of Asiatic Russia some ranges deserve attention, as the lower part of the Uralian chain, which bends to the W. above Orenburg.

The classical range of Caucasus forms a partial limit between the Russian empire and those of Turkey and Persia. Between the Euxine and the Caspian, the Caucasian chain extends for about 400 miles; and where the chief heights are distinctly marked, about 5 miles in breadth, but in many places 20 or 30. The summits are covered with perpetual ice and snow; and consist of granite, succeeded by slate and lime-stone. In ancient times they produced gold; and there are still vestiges of silver, lead, and

* P. 18.

† P. 22, 23.

‡ The mountain Adonshollo, celebrated for minerals, is in the southern extremity of Russian Daouria, Dec. Russ. v. 502.

copper ; and it is supposed of lapis lazuli. The vales abound with excellent forest trees.*

Forests.] Asiatic Russia is abundant in forests. On the west of the government of Irkutsk, an enormous dark and marshy forest of resinous trees extends to the river Kan.† The northern and eastern parts of Siberia are bare of wood ; the Norway fir not being found farther north than lat. 60, while the silver fir does not exceed lat. 58. In Europe, on the contrary, the Norway fir forms extensive forests in Lapmark, within the arctic circle.‡

Stepps.] After the forests, may be considered the extensive level plains, or *Stepps*, an appearance of nature almost peculiar to Asia, and some parts of European Russia : but somewhat similar to the sandy deserts of Africa. The stepps are not so barren of vegetation, being mostly only sandy, with scattered patches of thin grass, and at wide intervals a stunted thicket. Between the mouths of the Don and Volga is a stepp, which resembles the bed of a sea ; with spots of salt, and saline lakes, being entirely destitute of fresh water and wood.§

On the eastern side of the Volga begins an extensive stepp, formerly called that of the Kalmuks, from tribes who used to roam there, till they withdrew from the Russian dominions in 1771. To the S. it is bounded by the Caspian Sea, and the lake Aral ; while to the N. it may be regarded as connected with the stepp of Issim ; and on the east may be considered as extending to the river Sarusa ; the greater part not belonging to the Russian dominions, but being abandoned to the wandering Kirguses. This vast desert extends about 700 British miles from E. to W. and including Issim, nearly as far from N. to S. but on the N. of the Caspian the breadth does not exceed 220. A ridge of sandy hills stretches from near the termination of the Uralian chain towards the Caspian ; the rest is a prodigious sandy level, with sea shells, and salt pools.

This stepp of Barabin, N. W. of Omsk, is about 400 miles in length, and 300 in breadth, containing a few salt lakes, but in general of a good black soil, interspersed with forests of birch.¶ That of Issim aspires but rarely to the same quality : and in both are found many tombs, inclosing the remains of pastoral chiefs, Tartar or Mongul.

The vast space between the Ob and the Yenesei, from the north of Tomsk to the Arctic ocean, is regarded as one stepp, being a prodigious level with no appearance of a mountain, and scarcely of a hill. The same term is applied to the wider space between the Yenesei and the Lena, between the Arctic ocean on the north, and a river Tunguska, lat. 65 ; and to the parts beyond the Lena as far as the river Kolyma, or Covima.**

* See the last Travels of Pallas, 1793-4. London, 1801, 2 vols. 4to.

† Dec. Russ. vi. 183.

‡ Pennant, A. Z. p. clxxx.

§ Tooke's View, i. 178.

¶ The poverty of descriptive language is frequently to be regretted. A Russian stepp sometimes resembles a desert, at other times a savanna, waving with luxuriant grass.

** See P. 25.

Botany.] When we consider the great extent of the Asiatic provinces of the Russian empire, the scantiness of their population, and the few years that have as yet elapsed since the first attempt to examine their natural productions, we shall feel rather surprised at what has been done, than disappointed because no greater progress has been made in arranging and describing their indigenous vegetables. The labors of Steller, and Gmelin, and lastly of Pallas, under the munificent patronage of the Empress Catharine, have disclosed to the view of science the wilds of Siberia and the deserts of Tartary; and though many extensive tracts continue wholly unexplored, yet from the ample specimen that has been surveyed, we may form a very probable conjecture concerning the botany of the remainder.

Russia in Asia, with regard to its flora, is divided by nature into two unequal portions: The smaller of these is bounded west by the Don, and Wolga, east by the Uralian mountains, and south by the Caspian sea, and the Turkish and Persian frontiers. The climate of this district is delicious, and the soil fertile; it slopes towards the south, and is protected from the northern blasts by lofty mountains; in its botany it resembles the province of Taurida: the cedar, the cypress, the savine, red juniper, beech, and oak clothe the sides of the mountains; the almond, the peach, and the fig, abound in the warm recesses of the rocks; the quince, the apricot, the willow-leaved pear, and the vine, are of frequent occurrence in the thickets, and on the edges of the forests. The bogs are adorned by those exquisitely beautiful plants, the rhododendron ponticum, and azalea pontica; the olive, the stately wide-spreading eastern plane tree, the laurel, the bay and laurus-tinus, grow in abundance on the shores of the sea of Azof, and the Caspian; and the romantic vales of the Caucasus are perfumed and enlivened with the syringa, the jasmine, the lilac, and the Caucasian rose. From so flattering a specimen it is not to be doubted that future naturalists will gather an abundant harvest of useful and beautiful vegetables in these districts, which have hitherto been very imperfectly noticed.

By far the larger part of the Russian dominions in Asia is the wide expanse of Siberia, sloping towards the north, and shut up on the south by the snowy summits of the Altaian, and other mountains. As the winters are of great length and severity throughout the whole of this tract, none but the hardiest vegetables are found to inhabit it. The oak and the hazle, which endure the rigors of a German winter without shrinking, cannot exist in a Siberian climate; dwarfish specimens indeed of each, may be traced at the foot of the Altaian mountains, quite across Asia, as far as the banks of the river Amur, in Daouria, where, being screened from the northern blasts, they resume their natural size; but all that attempt to penetrate northward, become more diminutive as they advance, and soon entirely disappear. Even the common heath, and bog myrtle, which cover the lower parts of Lapland, venture but a very little way eastward of the Uralian mountains. We are not however hence to conclude that the mighty rivers of Siberia

pour their everlasting streams through a barren waste of perpetual snow ; on the contrary they are bordered with inexhaustible forests of birch, of alder, of lime, of Tartarian maple, of black and white poplar, and aspen, besides millions of noble trees of the pine species, such as the fir, the Scotch pine, the larch, the stone pine, and yew-leaved fir. Nor during their short summer are they destitute of many beautiful plants, that lie concealed under the snow during the greater part of the year.

The Siberian plum, and crab, the mountain ash, Tartarian honey-suckle, Tartarian mulberry, and the Daourian rose, form thickets of exquisite beauty, under shelter of which arise the white flowered peony, the yellow saranne lily, whose roots are a favorite food with the Tartarian tribes, and a multitude of others, a bare list of whose names would be neither amusing nor instructive. There are two other plants, the heracleum panaces, and fibricum, from the dried stalks of which the natives procure a saccharine efflorescence, whence is made, by fermentation and distillation, a coarse, ardent, intoxicating spirit.

Zoology.] In the greater part of Asiatic Russia the rein-deer, which extends to the farther east, performs the office of the horse, the cow, and the sheep ; if we except Kamchatka, where dogs are used for carriage. But the south may perhaps be considered as the native country of that noble animal, the horse, being there found wild, as well as a species of the ass.* The terrible urus, or bison, is yet found in the Caucasian mountains ; and the argali, or wild sheep, is hunted in Siberia. The ibex, or rock goat, is frequent on the Caucasian precipices ; and large stags are found in the mountains near the Baikal, with the musk animal ; the wild boar, wolves, foxes, and bears, of various names and descriptions, are also found. That kind of weazel, called the sable, affords a valuable traffic by its furs. Some kinds of hares appear, little known in other regions ; and the castor, or beaver, is an inmate of the Yenesei. The walrus, or large kind of seal, once termed the sea horse, is no stranger to the Arctic shores ; and the common seal extends to Kamchatka, while the manati, perhaps the mermaid of fable, inhabits the straits of Beiring, and the isles between the continents.

The horses of the Monguls are of singular beauty, some being ribbed like the tiger, and others spotted like the leopard. The nostrils of the foals are commonly slitted, that they may inhale more air in the course. The three great Nomadic nations of the centre of Asia, the Tartars, Monguls, and Mandshurs, have no aversion to horse flesh, which is in their opinion superior to beef ; but it is never eaten raw, as fabled, though they sometimes dry it in the sun and air, when it will keep for a long time, and is eaten without farther preparation. The *adon*, or stud of a noble Mongul, contains sometimes between three and four thousand horses and mares. The cattle are of a middling size, and pass the winter in the stepps, or deserts. As these nations use the milk of

* Pennant, A. Z. i. 2. See also Dec. Russ. vi. 309.

mares, so they employ the cow for draught, a string being passed through a hole made in their nostril. Mr Bell met a beautiful Tartar girl astride on a cow, attended by two male servants.

The best sables are found near Yakutsk and Nershinsk ; but those of Kamchatka are the most numerous, and several stratagems are employed to catch or kill the animal, without any injury to the skin, which is sometimes worth ten pounds on the spot. The black foxes are also highly esteemed, one skin being sometimes sufficient to pay the tribute of a village.* The rock or ice fox, generally of a white colour, sometimes blueish, is found in great numbers in the eastern Archipelago ; this animal rivals the ape in sly tricks and mischief. The bear is destroyed by many ingenious methods. The Koriakas contrive a loop and bait hanging from a tree, by which he is suspended. In the southern mountains his usual path is watched, a rope is laid in it with a heavy block at one end, and a noose at the other. When thus entangled by the neck, he is either exhausted by dragging so great a weight, or attacking the block with fury he throws it down some precipice, where it seldom fails to drag him to destruction. On the European side of the Uralian chain, where the peasants form bee hives in tall trees, the bear is destroyed in his attempt to seize the honey, by a trap of boards suspended from a strong branch, and slightly attached to the entrance of the hive : the animal finding this platform convenient for his purpose undoes the slight fastening to get at his luscious repast, but is instantly conveyed to a great distance, and remains suspended from the branch, till he be discovered and shot by the contrivers.

Mineralogy.] The mineralogy of Siberia is equally fertile, and displays many singular and interesting objects. Peter the Great, who directed his attention to every object of utility, was the first who ordered these remote mines to be explored, which have since supplied great resources of national wealth and industry.

The chief gold mines of Siberia are those of Catherinburg, on the east of the Uralian mountains, about lat. 57, where an office for the management of the mines was instituted in 1719. The mines of various sorts extend a considerable distance on the N. and S. of Catherinburg ; and the foundries, chiefly for copper and iron, are computed at 105. But the gold mines of Beresof, in this vicinity, were of little consequence, till the reign of Elizabeth. The mines of Nershinsk, discovered in 1704, are principally of lead mixed with silver and gold ; and those of Kolyvan, chiefly in the Schlangenberg, or mountain of serpents, so called by the German miners, began to be worked for the crown in 1748.

The gold is sometimes found native, but generally mingled with various substances, particularly silver.

Besides the copper mines in the Uralian mountains, there are also some in those of Altai. The most singular ore is the dendritic, somewhat resembling fern, of a pale color, and perhaps containing silver. Malachite, or stalactitic copper, is found in

* Tooke's View, iii. 43.

the greatest perfection in a mine about 30 miles S. of Catherinburg; what is called the Armenian stone is a blue malachite.* The red lead of Siberia is found in the mines of Beresof, on a micaceous sand stone. This substance, it is well known, has disclosed a new metal called chrome.

But the iron mines of Russia are of the most solid and lasting importance, particularly those which supply the numerous foundries of the Uralian mountains.† Yet Russia still imports quicksilver and zinc; and the semi metals are rare.

Rock salt is chiefly found near the Ilek, not far from Orenburg. Coal is scarcely known; but sulphur, alum, sal-amoniâc, vitriol, nitre, and natron, are found in abundance.

Nor must the gems of Siberia be omitted, of which there is a great variety, particularly in the mountain Adunshollo, near the river Argoon, in the province of Nershinsk, or Daouria. Common topazes are found in Adunshollo, in quadrangular prisms, as is also the jacint. The beryl, or aqua-marine, is found in Adunshollo, but in greater perfection in what are called the gem mines of Moursintsky, near Catherinburg, along with the chrysolite. Red garnets abound near the sea of Baikal; and a yellowish white kind was discovered by Laxman. The green felspar of Siberia is a beautiful stone, by the Russians carved into various ornaments. The Daourian mountains between the Onon and the Argoon also produce elegant onyx.

The beautiful stones called the hair of Venus and Thetis, being limpid rock crystals, containing capillary schorl, red or green, are found near Catherinburg.

The beautiful red and green jaspers of Siberia are from the most distant mountains, as already mentioned, and lapis lazuli is found near the Baikal. The Uralian chain also presents fine white marble; and in the numerous primitive ranges there are many varieties of granite and porphyry.

Mineral Waters.] Mineral waters do not abound in Asiatic Russia. There is a fetid sulphureous spring near Sarepta, on the frontier of Europe and Asia, and several others in Siberia. The baths on the Terek, towards the Caucasus, are of a middle temperature; and there are others in the province of Nershinsk; among the Kalmuks, south of the Altai, in the country sometimes styled Soongaria, and in the neighborhood of the sea of Baikal. Springs impregnated with naphtha and petroleum, are found near the Caspian and the Baikal.

But the chief mineral waters are those in Kamchatka, as described by Lesseps. The hot baths of Natchikin, not far from a volcano in the south of that peninsula, seem not to have been traced to their source, but they fall in a rapid cascade about 300 feet above the baths, benevolently erected by Mr. Kasloff, for the benefit of the Kamchadals, the stream being about a foot and a half deep, and six or seven feet wide. The water is extremely hot,

* Guthrie, Table of Gems. See XV. p. 212.

† Near mount Enor, or Nemir, not far from the river Yenisei, in the south of Siberia, Dr. Pallas discovered a large mass of native iron.

and of a very penetrating nature. On the west side of the gulf of Penjina, is a hot spring, which falls into the Tayatona, being of a great size, and emitting clouds of smoke.

ISLANDS BELONGING TO ASIATIC RUSSIA.

These have been already described in part.* The Kurilian isles extend from the southern promontory of Kamchatka towards the land of Jesso and Japan, being supposed to be about 20 in number, of which the largest are Poro Muschir, and Mokanturu. Several of these isles are volcanic ; and some contain forests of birch, alder, and pine. Most of them swarm with foxes of various colors. Even after the discoveries of La Perouse, it is difficult to distinguish what particular isles in the south of this chain are implied by the Russian appellations, and it would even appear that the Russian navigators had, with their usual confusion, described the same islands under different names. The inhabitants of the Kurilian isles seem to be of similar origin with the Kamchadals ; and in the interior of some is a people called hairy Kurilians, from what circumstance is not explained.

THE CHINESE EMPIRE.

THE Chinese empire, embracing the extensive conquests of the western countries, made the last century, may now be considered as extending from those parts of the Pacific ocean called the Chinese and Japanic seas, to the rivers Sarasou and Sihon in the west, a space of 81° , which, taking the medial latitude of 30 , will amount to nearly 4900 miles. From N. to S. this vast empire may be computed from the Uralian mountains, lat. 50 , to the southern part of China, about lat. 21 , being 29 of latitude, nearly 2030 miles.

This empire, therefore, consists of three principal divisions ; that of China Proper ; Chinese Tartary, or the territory of the Mandshurs, Monguls, and Cashgar, on the north and west ; and lastly, Tributary Dominions, embracing, among other countries, the singular and interesting region of Tibet, or Tibbet. These countries, which are arranged in the following table, from Hassel, are not only so wide and important, but are so radically different in the form of government, in the manners, and other circumstances, that it will be proper to describe each apart.

* See p. 141, Vol. I.

CHINESE EMPIRE.

Grand Divisions, according to Hassel.	Square Miles, according to Hassel.	Population, according to Sir Geo. Stanton, to Hassel.	Population, according for every sq. mile, acc. to Hassel.	
			40	84
EMPIRE OF CHINA,				
I. CHINA PROPER,				
<i>Provinces.</i>				
1 Pe-che-le	4,551,486	188,500,000		
2 Kiang-nan, 2 provinces	1,782,000	150,000,000	333,000,000	
3 Kiang-Sce	81,000	15,222,940	38,000,000	175
4 Tche-kiang	127,300	45,922,439	32,000,000	359
5 Fo-chen	99,000	11,006,604	19,000,000	111
a. Island of Formosa	53,600	15,429,690	21,000,000	286
6 Hou-pe	23,500	8,063,671	15,000,000	103
7 Hou-nan	198,200	16,910,423	14,000,000	85
8 Hon-an	89,000	16,232,507	13,000,000	85
9 Shan-Tung	89,000	25,180,734	25,000,000	182
10 Shan-see	75,680	9,768,189	24,000,000	281
11 Shen-see	200,000	14,699,457	27,000,000	128
12 Kun-sou	228,300	2,782,916	18,000,000	69
13 Se-chuen	109,000	6,782,976	12,000,000	69
14 Canton	107,000	3,947,414	27,000,000	12
15 Quang-see	148,000	2,078,892	10,000,000	62
16 Yu-nan	88,400		8,000,000	37
17 Ksei-cheou			9,000,000	14
				38

CHINESE EMPIRE.

475

Grand Divisions, according to Hassel.	Square Miles, according to Hassel.	Population, according to Hassel.	Population, according to Sir Geo. Staunton, acc. to Hassel.	Population for every sq. mile, acc. to Hassel.
II. CHINESE TARTARY,				
1 The Mongul Empire	2,190,000	3,000,000	1 $\frac{4}{11}$	
2 Country of Tungusees, or Mandshurs	1,164,000	1,000,000		
a. Province of Leatong	797,100	1,700,000		
b. The Territory of Sisan		668,852		
3 Cashgar, or Little Bucharia	230,000	300,000		
III. TRIBUTARY DOMINIONS,	776,000	31,500,000	1 $\frac{3}{11}$	
1 Kingdom of Corea	88,000	1,500,000		
2 Tibet, or Tangut	370,000	12,000,000		
a. Empire of the Delai Lama				
b. Empire of the Teshoo Lama				
c. Rajahship of Bootan				
d. Rajahship of Nepaul				
e. Kingdom of Setchuen				
3 Kingdom of Annan	165,000	10,000,000		
a. Cambodia				
b. Siam	82,500			
c. Cochinchina		82,000		
4 Kingdom of Tunquin				
5 The Leoo-Keo Isles	154,000	8,000,000		
			57	
				52

1st DIVISION.

CHINA PROPER.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, BOUNDARIES, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS AND ANTIQUITIES, RELIGION, ECCLESIASTICAL GEOGRAPHY, GOVERNMENT, LAWS, POPULATION, ARMY, REVENUES, POLITICAL IMPORTANCE AND RELATIONS, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, UNIVERSITIES, CITIES AND TOWNS, EDIFICES, ROADS, INLAND NAVIGATION, MANUFACTURES AND COMMERCE.

Names.] THIS distinguished region is by the natives styled Tchon-Kou, which signifies the centre of the earth, as they proudly regard other countries as mere skirts and appendages to their own. After the conquest of the northern part by the descendants of Zingis, it was styled Cathay, a name celebrated in travels, poetry, and romance ; while the southern part was called Mangi. The origin of the name of China, or Tsin, is uncertain. The Mahometan travellers of the 9th century, published by Renaudot, call this country Sin, but the Persians pronounce it Tchin.*

China Proper extends from the great wall in the north, to the Chinese sea in the south, about 1530 miles. The breadth from the shores of the Pacific, to the frontiers of Tibet, may be computed at nearly 1030 British miles. In square miles the contents have been estimated at 1,297,999, and in acres at 830,719,360.† On the east and south, the boundaries are maritime, and to the north they are marked by the great wall, and the desert of Shamo ; the confines, with Tibet on the west, seem to be chiefly indicated by an ideal line, though occasionally more strongly marked by mountains and rivers : particularly, according to D'Anville, the river Yalon, which falls into the Kian-ku, the country of Sifan lying between Tibet and China, on the south of the Eluts of Kokonor.

Original Population.] The population of China seems wholly aboriginal, but the form of the features appears to imply intimate affinity with the Tartars, Monguls, and Mandshurs ; yet the Chinese probably constitute a fourth grand division, not strictly derived from either of these races.

Progressive Geography.] The progressive geography of China, as known to the western nations, is not of ancient date. The oldest external relation which we possess, is that of two Mahome-

* English Translation. Remarks, p. 40.

† Macartney's Emb. iii. Appen.

tan travellers in the 9th century, who, among many fables, impart high ideas concerning the Chinese empire, and mention Canesu, supposed to be Canton, as a city of great trade, while the emperors resided at Camdan, which seems to be the city also called Nankin, or the Southern Court, in contradistinction to Pekin, or the Northern Court. This wide empire continued, however, obscure to the inhabitants of Europe, till the travels of Marco Polo appeared, in the end of the 13th century. Oderic, of Portenau, described his voyage to China, 1318,* and Sir John Mandeville visited China about 1340. In the following century there was a strange and unaccountable intermission of intercourse and research. After this relapse of darkness, however, authentic knowledge was gradually obtained by means of the discovery of the Cape of Good Hope, and the subsequent enterprizes of the Portuguese.

Historical Epochs.] The Chinese history is said to commence, in a clear and constant narration, about 2500 years before the birth of Christ. The founder of the monarchy is Fo-Hi ; but the regular history begins with Yao.† The dynasties or families who have successively held the throne amount to 22, from the first named Hia, to the present house of Tsing.‡ Yn, the first emperor of the house of Hia, is said to have written a book on agriculture, and to have encouraged canals for irrigation ; and it is also asserted that he divided the empire into nine provinces. The ancient revolutions of China would little interest the general reader. The dynasties, as usual, generally terminate in some weak or wicked prince, who is dethroned by an able subject. Sometimes the monarchy is divided into that of the south, which is esteemed the ruling and superior inheritance ; and that of the north. The emperor Tai Tsong, who reigned in the 7th century after Christ, is regarded as one of the greatest princes who have filled the Chinese throne. The Mandshurs to the north of China repeatedly influenced the succession to the empire ; but the Monguls, under Zingis and his successors, seized the five northern provinces. Hoaiting, who began to reign A. D. 1627, was the last prince of the Chinese dynasties. Some unsuccessful wars against the Mandshurs, had rendered this emperor melancholy and cruel ; and insurrections arose, the most formidable being conducted by two chiefs, Li and Techang. The former besieged Pekin, which was surrendered in consequence of the general discontent, and the emperor retiring to his garden, first slew his daughter with his sabre, and afterwards hanged himself on a tree, having lived but 36 years. The usurper seemed firmly seated on the throne, when a prince of the royal family invited the Mandshurs, who advanced under their king Tsong Te. The Mandshur monarch had scarcely entered China when he died ; and his son, of six years of age, was declared emperor, the regency being entrusted to his uncle. The young prince, named Chun Tchig, was the first emperor of

* Forster's Disc. in the north, p. 147.

† Du Halde, iii. 7. Haye, 1756, &c.

‡ Ib. i. 266, &c.

the present dynasty, and has been followed by four princes of the same Mandshur family.

Antiquities.] Among the remains of Chinese antiquity may be mentioned the coins of the ancient dynasties, of which arranged cabinets are formed by the curious natives. The artificial mountains present on their tops, temples, monasteries, and other edifices. The Chinese bridges cannot be sufficiently admired. They are built sometimes upon barges strongly chained together, yet so as to be parted, and to let the vessels pass that sail up and down the river. Some of them run from mountain to mountain, and consist only of one arch ; that over the river Saffrany is 400 cubits long, and 500 high, though a single arch, and joins two mountains ; and some in the interior parts of the empire are said to be still more stupendous. The triumphal arches of this country form the next species of artificial curiosities. Though they are not built in the Greek or Roman style of architecture, yet they are superb and beautiful, and erected to the memories of their great men, with vast labor and expense. They are said in the whole to be eleven hundred, two hundred of which are particularly magnificent. Their sepulchral monuments make likewise a great figure. Their towers, the models of which are now so common in Europe, under the name of pagodas, are great embellishments to the face of the country. They seem to be constructed by a regular order, and all of them are finished with exquisite carvings and gildings, and other ornaments. That at Nankin, which is 200 feet high, and 40 in diameter, is the most admired. It is called the Porcelain Tower, because it is lined with Chinese tiles. Their temples are chiefly remarkable for the disagreeable taste in which they are built, for their capaciousness, their whimsical ornaments, and the ugliness of the idols they contain. The Chinese are remarkably fond of bells, which gave name to one of their principal festivals. A bell of Pekin weighs 120,000 pounds, but its sound is said to be disagreeable. The last curiosity I shall mention, is their fire works, which in China exceed those of all other nations. In short every province of China is a scene of curiosities. Their buildings, except their pagodas, being confined to no order, and susceptible of all kinds of ornaments, have a wild variety, and a pleasing elegance, not void of magnificence, agreeable to the eye and the imagination, and present a diversity of objects not to be found in European architecture. In the famous Putawlaw, or temple of public worship, in the city of Pekin, hangs a bell which the Chinese assured Capt. Turner (who saw it) weighs upwards of 20,000 pounds, and requires a hundred men to ring it. This, however, is never attempted, but to call the people to arms, in case of invasions, insurrections, or on public thanksgivings for any signal blessing or victory. In one of the gardens of the emperor stands a temple, in which is a magnificent throne, upon which, it is an ancient and invariable custom of the emperors of China, to seat themselves at certain times, to hear and determine all matters of complaint, that might be brought before them. Such extraordinary virtue is conceived to be attached to

this throne, that, according to the justice or injustice of the emperor's decrees, his existence or immediate death depend. This temple and seat of justice is said, by the Chinese, to have been erected by divine command, and had existed for many thousand years.

But the chief remain of ancient art in China is that stupendous wall, extending across the northern boundary.* This work, which is deservedly esteemed among the grandest labors of art, is conducted over the summits of high mountains, some of which rise to the height of 5225 feet, across the deepest vales, over wide rivers, by means of arches ; and in many parts is doubled or trebled to command important passes, and at the distance of almost every hundred yards is a tower, or massy bastion. The extent is computed at 1500 miles ; but in some parts of smaller danger, it is not equally strong nor complete, and towards the N. W. is only a rampart of earth. For the precise height and dimensions of this amazing fortification, the reader is referred to the work already quoted, whence it appears, that near Koopeko the wall is 25 feet in height, and at the top about 15 feet thick : some of the towers which are square, are 48 feet high, and about 50 feet wide. The stone employed in the foundations, angles, &c. is a strong, grey granite ; but the greatest part consists of blueish bricks, and the mortar is remarkably pure and white.

Sir George Staunton considers the era of this great barrier as absolutely ascertained, and he asserts that it has existed for two thousand years. Mr. Bell, who resided for some time in China, and whose travels are deservedly esteemed for the accuracy of their intelligence, assures us† that this wall was built about 600 years ago (that is about the year 1160), by one of the emperors, to prevent the frequent incursions of the Monguls, whose numerous cavalry used to ravage the provinces, and escape before an army could be assembled to oppose them. Renaudot observes that no oriental geographer, above 300 years in antiquity, mentions this wall :‡ and it is surprising that it should have escaped Marco Polo ; who, supposing that he had entered China by a different route, can hardly be conceived, during his long residence in the north of China, and in the country of the Monguls, to have remained ignorant of so stupendous a work. Amidst these difficulties, perhaps it may be conjectured that similar modes of defence had been adopted in different ages ; and that the ancient rude barrier having fallen into decay, was replaced, perhaps after the invasion of Zingis, by the present erection, which even from the state of its preservation, can scarcely aspire to much antiquity.

Religion.] According to Du Halde, the ancient Chinese worshipped a supreme being, whom they styled Chang Ti, or Tien, which is said to imply the spirit which presides over the heavens ; but in the opinion of others is only the visible firmament. They also worshipped subaltern spirits, who presided over kingdoms, provinces, cities, rivers, and mountains. Under this system,

* Sir G. Staunton, ii. 360, 8vo.

† Travels, ii. 112, 8vo.

‡ Ut supra, 137.

which corresponds with what is called Shamanism, sacrifices were offered on the summits of hills.

About A. D. 65 the sect of Fo was introduced into China from Hindostan. The name was derived from the idol Fo, (supposed to be the Boodh of Hindostan,) and the chief tenets are those of the Hindoos, among which is the metempsycosis, or transmigration of souls from one animal to another. The priests are denominated Bonzes, and Fo is supposed to be gratified by the favour shewn to his servants. Many subordinate idols are admitted ; but as the Jesuits found the followers of Fo the most adverse to Christianity, they have without foundation called them Atheists.

Since the fifteenth century many Chinese literati have embraced a new system, which acknowledges an universal principle, under the name of Taiki, seeming to correspond with the soul of the world of some ancient philosophers. This opinion may indeed deserve the name of Atheism ; nor is it unusual to find ingenious reasoners so far disgusted with gross superstitions as to fall into the opposite extreme of absurdity. But such opinions are confined to very few ; and the Chinese are so far from being atheists, that they are in the opposite extreme of Polytheism, believing even in petty demons, who delight in minute acts of evil, or good. There is properly no order of priests, except the Bonzes of the sect of Fo ; this sect and that of Lao Kian, which is the same with that of the Tai See, admit of monasteries. The Chinese temples are always open, nor is there any subdivision of the month known in the country.*

A Jewish colony appeared in China, under the dynasty of *Han*, who began to reign in the 206th year before Christ. It was reduced to seven families, when F. Gozani, a Jesuit missionary, visited it ; which families were established at Cai-fong, the capital of the province of Honan. They had a synagogue, in which were thirteen tabernacles, placed upon tables, each surrounded by small curtains. The sacred *Kim* of Moses (the Pentateuch) was shut up in each of these tabernacles, twelve of which represented the twelve tribes of Israel ; the thirteenth, Moses. The books were written in a neat, distinct hand, on long pieces of parchment, and folded on rollers. In the middle of the synagogue stands the chair of Moses, in which every Saturday, and on days of great solemnity, they place the Pentateuch, and read some portions of it.

They were in possession of some books of the Old Testament, other than the Pentateuch ; of some of them they had no knowledge ; others they had lost in an inundation which happened October 29, 1642.

These Jews preserve circumcision, and several other ceremonies mentioned in the Old Testament, such as the paschal lamb, the feast of unleavened bread, the Sabbath, &c.

These seven Jewish families intermarry, and never mix with their neighbors. They also abstain from blood. They say their ancestors came from the west, from the kingdom of Judah, which

* Pauw, Recherches Philosophiques sur les Egyptiens et les Chinois, tom. ii. 217.

Joshua conquered, after they left Egypt, and had crossed the Red sea, and traversed the desert ; and that the number of Jews who left Egypt was 600,000. They neither kindle fire, nor cook any victuals on Saturday ; but prepare on Friday, whatever may be necessary for the following day. They read the Bible with a veil over their faces, in remembrance of Moses.* The Mahometans also, have become very numerous in China. During the time of a terrible famine in Chang-tong, they purchased more than 10,000 children, for whom, when grown up, they procured wives, and built houses, and even formed whole villages of them.

The Holy Scriptures are now in a course of translation, by several hands, into the Chinese language. Christian missionaries are sent to some parts of these vast and populous dominions, and hope is entertained that these people, who have so long sat in darkness, will receive and enjoy the light and blessings of the Gospel.

Government.] The government of China is well known to be patriarchal. The emperor is indeed absolute ; but the examples of tyranny are rare, as he is taught to regard his people as his children, and not as his slaves. The stability of the government, in all its essential, and even minute forms and customs, justly astonishes those who are the most versed in history. It arises from a circumstance unknown in any other government, the admission and practice of the principle asserted by Lord Bacon, that *knowledge is power*. For all the officers of government pass through a regular education, and a progress of rank, which are held indispensable. Of these officers, who have been called mandarins, or commanders, by the Portuguese, there are nine classes, from the judge of the village to the prime minister. The profession requiring a long and severe course of study, the practice of government remains, like that of medicine, unshaken by exterior events ; and while the imperial throne is subject to accident and force, the remainder of the machine pursues its usual circle. In so vast and populous an empire, perhaps the stability of the state is incompatible with much freedom ; yet the ideas of an European are shocked by the frequent use of the rod, a paternal punishment, which would in his eyes appear the most degrading species of slavery. The soldiers, however, shew the greatest tenderness to the people, and every sentence of death must be signed by the emperor.

The governors of the provinces have great and absolute power, yet rebellions are not unfrequent. Bribery is also an universal vice ; and the Chinese government, like most others, is more fair in the theory, than in the practice. Yet the amazing population, and the general ease and happiness of the people, evince that the administration of the government must be more beneficial than any yet known among mankind.

Laws.] The Chinese laws bear a very ancient date ; the great body of them were in existence 250 years before the Christian era, and although subject to the revision and alteration of the

* Abbe Grosier, vol. ii. ch. vii. p. 259.

reigning prince ; yet such is his reverence, and that of the people, for the usages of their ancestors, that a material change seldom occurs. The most prominent characteristics of the laws of China, are clearness and consistency, connected, however, with a minuteness and accuracy so excessive, as must, in a great measure, prevent the designed effect of the law. Every shade of guilt is provided for by a similar gradation of punishments. Another peculiarity of their penal code is the excessive severity with which it punishes offences against the government. Not only the person guilty of treason, but all his male relations of the first degree, are beheaded, and his female relations sold to slavery. The bamboo is the instrument with which corporal punishment is usually inflicted. From punishment by this instrument, the highest officers, civil or military, are not exempted.

Persons under fifteen, or over seventy, can redeem themselves from all but capital punishments, by the payment of a small fine. Those under seven, or above ninety, can be punished for nothing but treason. Foreigners are subject to the same punishments with native citizens.

Robbery in the night is punished with death ; in the day, with a hundred blows, and banishment. Theft has every gradation of punishment, from sixty blows with the bamboo, to death. Murder is punished with death. Administering poison is capital, even though it does not kill. Striking parents is death in all cases. The authors of all *anonymous* accusations shall suffer *death*, though the charge be true. Bribery has a large scale of punishments, varying in severity, according as the bribe is large, or small, taken for a criminal or innocent object. Forging an imperial edict is death. If a person accidentally set fire to his own dwelling, and the flames spread to an imperial palace, he suffers death.

Notwithstanding the extreme rigor of this code, in theory, we have reason to believe that it is very rarely carried into practice. Bribery, we know, is a common crime throughout the empire ; the punishment, however, is rarely inflicted.

Their revenue laws bear a striking resemblance to those recently adopted in Europe and our own country. The Chinese have not only the tax and monopoly of salt, but a regular excise upon tea, alum, and almost every sort of merchandise, with a system of *permits*, excise officers, inspectors, licences to traders, and penalties upon *smuggling*, almost exactly as among European nations and our own, at the present day. The smuggler, however, is treated rather more mildly, as he forfeits only half of the unlicensed goods, beside the vessel in which the goods were conveyed.

The interest of money is fixed by the laws of China at 36 per cent. per annum. In a country so populous as China, where the competition of multitudes must have reduced the profits of trade to their lowest rate, it seems unaccountable that money should bear so high a price. The truth probably is, that this is the maximum, and that the interest usually given is greatly inferior. Mortgages have been long known in China, and many regulations made with regard to them.

The establishment of a government post has long been known as one of the ancient institutions of China. The rate of travelling with public dispatches is not much less than a hundred miles in a day.*

Population.] The population of China has been a topic of considerable debate. Pauw, a bold and decisive asserter, but no authority, supposes that the population is exaggerated when it is computed at 82,000,000.† The recent English embassy was astonished at the excess of population; and Sir George Staunton has published the table, inserted in the General Table, from the information of a mandarin of high rank, who had every opportunity of exact knowledge.

How far this table may deserve implicit credit, may be doubted by those who know the difficulty of such researches, even in the most enlightened countries of Europe.

As the Chinese laws permit no native to leave his country, there can be no colonies properly so called.‡

Army.] The army has been computed by Barrow, at 1,000,000 infantry, and 800,000 cavalry. Hassel, however, from *Desguignes*, estimates them only at 600,000 infantry, and 210,000 cavalry.

Revenue.] Sir George Staunton estimates the revenue at 594 millions of guilders, equal to £66,000,000 sterling. This is also the estimate of Barrow; who adds, that when the expenses are deducted, only 12,000,000 sterling are left for the treasury of the empire, out of which the expenses of the empire being paid, the surplus goes into the crown treasury. Desguignes disputes this account, and fixes the highest amount of the revenue at only 180 millions of guilders, more than a third less than the estimates of Staunton and Barrow.

Political Importance and Relations.] The political importance and relations of China may be said to be concentrated in itself, as no example is known of alliance with any other state. It has been supposed that one European ship would destroy the Chinese navy, and that 10,000 European troops would overrun the empire. Yet its very extent is an obstacle to foreign conquest, and perhaps not less than 100,000 soldiers would be necessary to maintain the quiet subjugation; so that any foreign yoke might prove of very short continuance. Were the Chinese government persuaded of the utility of external relations, an alliance with the English might be adopted, as a protection against maritime outrage, while the Russian power might be divided by connections with the sovereigns of Persia.

Manners and Customs.] The Chinese being a people in the highest state of civilization, their manners and customs might re-

* Ta Tsing Len Lee, being the fundamental laws, supplementary statutes and penal code of China, originally published at Pekin, and translated by Sir George T. Staunton, Bart. London, 1808.

† Recherches, i. 78.

‡ Yet the number of Chinese at Batavia, and other situations in the Oriental Archipelago, many of whom pass as traders to and from their country, shews that these laws are little regarded.

quire a long description, especially as they are very different from those of other nations. The limits of this work will only admit a few hints. In visiting the sea ports of China, foreigners have been commonly impressed with the idea of fraud and dishonesty ; but it is to be supposed that these bad qualities are not so apparent where there are fewer temptations. The indolence of the upper classes, who are even fed by their servants, and the filthiness of the lower, who eat almost every kind of animal, in whatever way it may have died, are also striking defects, though the latter may be occasioned by dire necessity in so populous a country. To the same cause may be imputed the exposition of infants. On the other hand the character of the Chinese is mild and tranquil, and universal affability is very rarely interrupted by the slightest tincture of harshness or passion. These qualities may be partly imputed to the vigilant eye of the patriarchal government, and partly to strict abstinence from heating foods and intoxicating liquors. The general drink is tea, of which a large vessel is prepared in the morning for the occasional use of the family during the day. It is not permitted to bury in cities or towns, and the sepulchres are commonly on barren hills and mountains, where there is no chance that agriculture will disturb the bones of the dead. The color of mourning is white ; and it ought on solemn occasions to continue for three years, but seldom exceeds twenty-seven months.* The walls of the houses are sometimes of brick, or of hardened clay, but more commonly of wood ; and they generally consist only of a ground floor, though in those of merchants there be sometimes a second story, which forms the warehouse. The houses are ornamented with columns, and open galleries, but the articles of furniture are few. The dress is long with large sleeves, and a flowing girdle of silk. The shirt and drawers vary according to the seasons, and in winter the use of furs is general from the skin of the sheep to that of the ermine. The head is covered with a small hat in the form of a funnel, but this varies among the superior classes, whose rank is distinguished by a large bead on the top, diversified in colour according to the quality. The dress is in general simple and uniform ; and on the audience given to Lord Macartney, that of the emperor was only distinguished by one large pearl in his bonnet. The chief amusements of the Chinese seem to be dramatic exhibitions, fire works, in which they excel all other nations ; and feats of deception and dexterity.

Notwithstanding the industry of the people, their amazing population frequently occasions a dearth. Parents, who cannot support their female children, are allowed to cast them into the river, but they fasten a gourd to the child, that it may float on the water ; and there are often compassionate people of fortune, who are moved by the cries of the children to save them from death. The Chinese, in their persons are middle sized, their faces broad, their eyes black and small, their noses rather short. The Chinese have particular ideas of beauty. They pluck up the hairs of the lower

* Du Halde, iii, 146.

part of their faces by the roots with tweezers, leaving a few straggling ones by way of beard. Their Tartar princes compel them to cut off the hair of their heads, and like Mahometans, to wear only a lock on the crown. Their complexion towards the north is fair, towards the south, swarthy, and the fatter a man is, they think him the handsomer. Men of quality and learning, who are not much exposed to the sun, have delicate complexions, and they who are bred to letters let the nails of their fingers grow to an enormous length, to shew that they are not employed in manual labor.

The women have little eyes, plump rosy lips, black hair, regular features, and a delicate though florid complexion. The smallness of their feet is reckoned a principal part of their beauty, and no swathing is omitted, when they are young, to give them that accomplishment, so that when they grow up, they may be said to totter rather than to walk. This fanciful peace of beauty was probably invented by the ancient Chinese, to palliate their jealousy.

Their dress varies according to the degrees among them. The men wear caps on their heads, of the fashion of a bell ; those of quality are ornamented with jewels. The rest of their dress is easy and loose, consisting of a vest and a sash, a coat or gown thrown over them, silk boots quilted, with cotton, and a pair of drawers. The ladies towards the south wear nothing on their heads. Sometimes their hair is drawn up in a net, and sometimes it is dishevelled. Their dress differs but little from that of the men, only their gown or upper garment has very large open sleeves. The dress both of men and women varies, however, according to the temperature of the climate.

The parties in marriage never see each other in China, till the bargain is concluded by the parents, and that is generally when the parties are children. The bride is purchased by a present to her parents. Next to being barren, the greatest scandal is to bring females into the world ; and if a woman of a poor family happens to have three or four girls successively, it not unfrequently happens that she will expose them on the high roads, or cast them into a river. Polygamy is allowed.

People of note in their funerals, cause their coffins to be made, and their tombs to be built in their life time. Every Chinese keeps in his house a table, upon which are written the names of his father, grandfather, and great grandfather, before which they frequently burn incense, and prostrate themselves ; and when the father of a family dies, the name of the great grandfather is taken away, and that of the deceased is added.

Language.] To obtain a knowledge of the Chinese language was formerly deemed the labor of a life. The accounts of travellers represented that the number of their words was immense ; that for each idea they had a separate character, and that between the meanings of the different characters there was no connexion. To understand the language, therefore, it was necessary to learn the meaning of an endless number of arbitrary characters. Recent

investigation, however, has proved that these opinions were without foundation. It is now discovered that the language of the Chinese, like that of other nations, is of a regular and systematic formation. Their alphabet is composed of 214 elementary characters, or *letters*. By the various combinations of these elements, all the other characters or *words* in the language are formed. Each element has a distinct meaning by itself, and when two or more are united in one word, the meaning of the compound partakes of that of the several elements of which it is composed. Thus the two elementary characters, signifying *fire* and *wood*, when united form the Chinese word for *burn*, and the repetition of the character for *wood* forms a compound denoting *forest*.

With respect to the pronunciation of the Chinese language, the first thing which strikes us is, that all their words are monosyllables. They have selected 36 characters for initial, and 14 for final sounds. The initial sounds are all consonants, the final, all vowels, liquids or nasals. By combining these are formed 432 monosyllables, and by variously modifying the sounds of the finals, together with the application of accent and quantity, the whole number of monosyllables has been extended to 2,178. The whole number of characters or words in the language is 35,000. Dividing this by 2,178, the number of monosyllables, it will be readily seen, that the same pronunciation is used for sixteen different words. This is an inconvenience peculiar to the Chinese language, and in colloquial discourse must sometimes prove a serious embarrassment. Mr. Marshman, who has lately written a dissertation on this subject, and from whom these remarks are principally collected, gives, as the result of his research, "that though totally different in its nature, the Chinese language is little less regular in its formation, and scarcely more difficult of acquisition than the Sungscrit, the Greek or even the Latin."

Education.] The schools of education are numerous, but the children of the poor are chiefly taught to follow the business of their fathers. In a Chinese treatise of education published by Du Halde, the following are recommended as the chief topics. 1. The six virtues, namely, prudence, piety, wisdom, equity, fidelity, concord. 2. The six laudable actions, to wit, obedience to parents, love to brothers, harmony with relations, affection for neighbors, sincerity with friends, and mercy with regard to the poor and unhappy. 3. The six essential points of knowledge, that of religious rites, music, archery, horsemanship, writing, and accompts. Such a plan is certainly more useful than the acquisition of dead languages, dancing, or many other branches of our English education.

Cities and Towns.] The chief cities of China are Pekin and Nankin, or the northern and southern courts, the former being the Cambula, or city of the Chan, in writings of the middle ages, the capital of Cathsay, as Nankin was of Mangi. Pekin occupies a large space of ground; but the streets are wide, and the houses seldom exceed one story. The length of what is called the Tar-

tar city is about four miles, and the suburbs are considerable.* By the best information which the recent embassy could procure, the population was computed at 3,000,000. The houses indeed are neither large nor numerous; but it is common to find three generations with all their wives and children under one roof, as they eat in common, and one room contains many beds. The neatness of the houses and various furniture and goods of the shops, delight the eye of the visitor. At Pekin the grand examinations take place, which confer the highest degree in literature, or in other words the chief offices in government. Excessive wealth or poverty seem equally unknown, as there is no right of primogeniture, and no hereditary dignity, and there are properly but three classes of men in China, men of letters from among whom the mandarins are selected; cultivators of the ground, and mechanics including merchants.† The walls of this capital are of considerable strength and thickness; and the nine gates of no inelegant architecture. Strict police and vigilance are observed, and the streets are crowded with passengers and carriages. The grandest edifice is the imperial palace, which consists of many picturesque buildings, dispersed over a wide and greatly diversified space of ground, so as to present the appearance of enchantment.

Nankin, which was the residence of the court till the fifteenth century, is a yet more extensive city than Pekin, and is reputed the largest in the empire. The walls are said to be about 17 miles in circumference.

The chief edifices are the gates with a few temples; and a celebrated tower covered with porcelain, about 200 feet in height. Such towers were styled pagodas by the Portuguese, who supposed them to be temples; but they seem to have been chiefly erected as memorials, or as ornaments, like the Grecian and Roman columns.

To the European reader one of the most interesting cities is Canton, which is said to contain a million and a half of inhabitants; numerous families residing in barks on the river. The European factories, with their national flags, are no small ornaments to this city. The chief export is that of tea, of which it is said that about 13,000,000 of pounds weight are consumed by Great Britain and her dependencies, and about 5,000,000 by the rest of Europe, beside the immense quantity brought to America. The imports from England, chiefly woollens, with lead, tin, furs, and other articles, are supposed to exceed a million; and the exports a million and a half, besides the trade between China and the English possessions in Hindostan. Other nations carry to Canton the value of about 200,000l. and return with articles to the value of about 600,000l. So that the balance in favour of China may be computed at a million sterling.

* Staunton, ii. 297.

† Ib. ii. 329. The military must be regarded as a fourth class.

The other large cities of China are almost innumerable ; and many of the villages are of a surprising size. Of the cities, Singan is by some esteemed equal to Pekin. In general the plan and fortifications are similar ; and a mandshur garrison is carefully maintained.

Edifices.] The most striking and peculiar edifices in China are the pagodas or towers, already mentioned, which sometimes rise to the height of nine stories, of more than twenty feet each. The temples, on the contrary, are commonly low buildings, always open to the devout worshippers of polytheism. The whole style of Chinese architecture is well known to be singular, and is displayed with the greatest splendor in the imperial palace at Pekin.

Roads.] The roads are generally kept in excellent order, with convenient bridges. That near the capital is thus described by Sir George Staunton : " This road forms a magnificent avenue to Pekin for persons and commodities bound for that capital, from the east and from the south. It is perfectly level ; the centre, to the width of about twenty feet, is paved with flags of granite, brought from a considerable distance, and of a size from six to sixteen feet in length, and about four feet broad. On each side of this granite pavement is a road unpaved, wide enough for carriages to cross upon it. The road was bordered in many places with trees."

Inland Navigation.] The canals of China have long excited the envy and wonder of other nations. As the two grand rivers Hoanho and Kianku bend their course from west to east, the chief object was to intersect the empire from north to south ; which was in a great measure accomplished by the imperial canal. This wonderful work, which in utility and labour exceeds the enormous wall, is said to have been begun in the tenth century of the Christian era, 30,000 men having been employed for 43 years in its completion.

" This great work differs much from the canals of Europe, which are generally protracted in straight lines, within narrow bounds, and without a current, whereas that of China is winding often in its course, of unequal and sometimes considerable width, and its waters are seldom stagnant.

" The ground which intervened between this bed of the artificial river, and that of the Eu-ho, was cut down to the depth of about 30 feet, in order to permit the waters of the former to flow with a gentle current into the latter. Their descent is afterwards checked occasionally by flood-gates thrown across the canal, wherever they were judged to be necessary. This canal has no locks like those of Europe. The flood-gates are simple in their construction, easily managed, and kept in repair at a trifling expense. They consist merely of a few planks let down separately one upon another, by grooves cut into the sides of the two solid abutments or piers of stone, that project one from each bank, leaving a space in the middle just wide enough to admit a passage for the largest vessels employed upon the canal. As few parts of it are entirely level, the use of these flood gates assisted by others

cut through its banks, is to regulate the quantity of water in the canal. Some skill is required to be exerted, in order to direct the barges through them without accident. For this purpose a great oar projects from the bow of the vessel, by which one of the crew conducts her with the greatest nicety. Men are also stationed on each pier with fenders made of skins stuffed with hair, to prevent the effect of the vessels striking immediately against the stone, in their quick passage through the gates.

"Light bridges of timber are thrown across those piers, which are easily withdrawn whenever vessels are about to pass underneath. The flood-gates are only opened at certain stated hours, when all the vessels collected near them in the interval pass through on paying a small toll, appropriated to the purpose of keeping in repair the flood-gates and banks of the canal. The loss of water occasioned by the opening of the flood-gate is not very considerable, and is soon supplied by streams conducted into the canal from the adjacent country on both sides."*

The same author describes this canal as beginning at Lin-sin-choo, where it joins the river Eu-ho, and extending to Han-choo-foo, in an irregular line of about 500 miles. Where it joins the Hoan-ho, or Yellow River, till it is about three quarters of a mile in breadth. In the south the river Kan-Kian, which runs from S. W. to N. E. supplies a very considerable part of the navigation. The commodiousness and length of the Chinese canals are incredible. The chief of them are lined with hewn-stone on the sides, and they are so deep that they carry large vessels, and sometimes they extend above 1000 miles in length. The royal canal from Canton to Pekin is 825 miles long, 50 feet wide, and 9 feet deep. The vessels are fitted up for all the conveniences of life; and it has been thought by some, that in China the water contains as many inhabitants as the land. They are furnished with stone quays, and sometimes with bridges of an amazing construction. The navigation is slow, and the vessels sometimes drawn by men. About 10,000 boats from 200 tons and under, are kept at the public expense. No precautions are wanting, that could be formed by art or perseverance, for the safety of the passengers, in case a canal is crossed by a rapid river, or exposed to torrents from the mountains. These canals, and the variety that is seen upon the borders, render China the most delightful to the eye of any country in the world, as well as fertile, in places that are not so by nature.

Manufactures and Commerce.] The manufactures of China are so multifarious as to embrace almost every article of industry. The most noted manufacture is that of porcelain, and is followed in trade by those of silk, cotton, &c. They make paper of the bark of bamboo, and other trees, as well as of cotton, but not comparable for records, or printing, to the European. Their ink, for the use of drawing, is well known in England, and is said to be made of oil and lampblack. Their printing is done by cutting

* Sir G. Staunton, iii. 204.

their characters on blocks of wood. The porcelain of China has been celebrated from remote ages, and is chiefly prepared from a pure white clay called kaolin; while the petunsi is understood to be a decayed felspar. Some writers add soap rock, and gypsum.*

The internal commerce of China is immense, but the external trade is comparatively small, considering the vastness of the empire; a scanty intercourse exists with Russia and Japan: but the chief export is that of tea, which is sent to England and America, between one and two millions yearly. The principal port for foreign trade is Canton, which see.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Climate and Seasons.] THE European and American intercourse with China being chiefly confined to the southern part of the empire, the climate is generally considered as hot, whereas the northern part of this extensive country is liable to all the rigors of the European or North American winter.† At Pekin such is the effect of the great range of Tartarian, or rather Manshurian mountains covered with perpetual snow, that the average degree of the thermometer is under 20° in the night during the winter months; and even in the day it is considerably below the freezing point. In so wide an empire, such a diversity of climate and seasons must occur that no general description can suffice.

Face of the Country.] The face of the country is greatly diversified; and though in a general view it be flat and fertile, and intersected with numerous large rivers and canals, yet there are chains of granitic mountains and other districts of a wild and savage nature. Cultivation has however considerably reduced the number and extent of such features, whence the natives seek to diversify the sameness of improvement, by introducing them in miniature into their gardens. In general the appearance of the country is rendered singularly picturesque by the peculiar style of the buildings, and uncommon form of the trees and plants.

The soil is various, and agriculture by the account of all travelers is carried to the utmost degree of perfection. The emperor himself sets an annual example of the veneration due to agriculture, the first and most important province of human industry.

* Sir G. Staunton, iii. 500.

† Ib. iii. 157.

Sir George Staunton thus expresses his ideas of Chinese agriculture :*

" Where the face of the hill or mountain is not nearly perpendicular to the level surface of the earth, the slope is converted into a number of terraces, one above another, each of which is supported by mounds of stone. By this management it is not uncommon to see the whole face of a mountain completely cultivated to the summit. The stages are not confined to the culture of any particular vegetable. Pulse, grain, yams, sweet potatoes, onions, carrots, turnips, and a variety of other culinary plants are produced upon them. A reservoir is sunk in the top of the mountain. The rain-water collected in it is conveyed by channels successively to the different terraces, placed upon the mountains' sides. In spots too rugged, barren, steep, or high for raising other plants, the camellia sesanqua, and divers firs, particularly the larch, are cultivated with success.

" The collection of manure is an object of so much attention with the Chinese, that a prodigious number of old men and women, as well as of children, incapable of much other labour, are constantly employed about the streets, public roads, banks of canals, and rivers, with baskets tied before them, and holding in their hands small wooden rakes to pick up the dung of animals and offals of any kind that may answer the purpose of manure ; but above all others, except the dung of fowls, the Chinese farmers prefer night soil. This manure is mixed sparingly with a portion of stiff loamy earth, and formed into cakes dried afterwards in the sun. In this state it sometimes becomes an object of commerce, and is sold to farmers, who never employ it in a compact state. Their first care is to construct large cisterns for containing, besides those cakes and dung of every kind, all sorts of vegetable matter, as leaves or roots or stems of plants, mud from the canals and offals of animals, even to the shavings collected by the barbers. With all these they mix as much animal water as can be collected, or of common water as will dilute the whole ; and in this state generally in the act of putrid fermentation, they apply it to the plowed or broken earth.

" The quantity of manure thus collected must however be still inadequate to that of the cultured ground, which bears so vast a proportion to the whole surface of the country. It is reserved therefore in the first instance, for the purpose of procuring a quick succession of culinary vegetables, and for forcing the production of flowers and fruit. Among the vegetables raised most generally, and in the greatest quantities, is a kind of cabbage, called by the Chinese pe-tsai, or white herb, which is of a delicate taste, somewhat resembling cos-lettuce, and is much relished in China by foreigners as well as natives. This vegetable and rice, together with a relish of garlic or of onions, in room of animal food, and followed by a little infusion of coarse tea, serve often as a meal for a Chinese peasant or mechanic. The Chinese husbandman always steeps the seeds he intends to sow in liquid ma-

nure, until they swell and germination begins to appear: which experience, he says, has taught him to have the effect of hastening the growth of plants, as well as of defending them against the insects hidden in the ground in which the seeds were sown.

"The great object of Chinese agriculture, the production of grain, is generally obtained with little manure, and without letting the land lie fallow. Irrigation is practised to a very great extent. The husbandry is singularly neat, and not a weed is to be seen."

Rivers.] In describing the rivers of this great empire two are well known to deserve particular attention, namely, the Hoan-ho and the Kian-ku. These have been described.* At about 70 miles from the sea, where this river is crossed by the imperial canal, the breadth is little more than a mile, and the depth only about nine or ten feet; but the velocity equals seven or eight miles in the hour.†

To these grand rivers many important streams are tributary, but it would be infinite to enumerate the various waters which enrich and adorn this wide empire. The Yamour and Argun form the boundary between Russian and Chinese Tartary. The Kiam and the Tay are also considerable rivers.

Common water in China is very indifferent, and is in some places boiled to make it fit for use.

Lakes.] China is not destitute of noble and extensive lakes. Du Halde informs us that the lake of Tong-tint-how, in the province of Hou-quang, is more than 80 leagues in circumference. That of Poyang-hou, in the province of Kiang-Si, is about 30 leagues in circumference, and is formed by the confluence of four rivers as large as the Loire. There is also a considerable lake not far to the south of Nankin, called Tai-how. Some of these are described in the late embassy. Upon a lake near the imperial canal were observed thousands of small boats and rafts, constructed for a singular species of fishery. "On each boat or raft are ten or a dozen birds, which, at a signal from the owner, plunge into the water; and it is astonishing to see the enormous size of fish with which they return grasped within their bills. They appear to be so well trained that it did not require either ring or cord about their throats, to prevent them from swallowing any portion of their prey, except what the master was pleased to return to them for encouragement and food. The boat used by these fishermen is of a remarkably light make, and is often carried to the lake, together with the fishing birds, by the men who are there to be supported by it."

Mountains.] Concerning the extensive ranges of Chinese mountains, no general and accurate information has yet been given. Du Halde's ample description of the Chinese empire only informs us that some abound with mines of silver, others produce marble and crystal, while some supply medicinal herbs. From the same author we learn that the provinces of Yunnan, Koeit-cheou, Setchuen, and Fokien, are so mountainous as greatly to impede their cultivation; and that of Tchekiang has dreadful

* Page 17.

† Staunton, iii. 234.

mountains on the west. In the province of Kiangnan there is a district full of high mountains, which also abound in the provinces of Chensi and of Shansi. This imperfect information is little enlarged by the account published of the late embassy; and perhaps Mr. Arrowsmith's recent map of Asia contains as authentic information as can be procured concerning the course and extent of the Chinese mountains. It hence appears that a considerable branch extends from those in central Asia, running south to the river Hoan-ho. Two grand ranges, running E. and W. intersect the centre of the empire, seemingly continuations of the enormous chains of Tibet. In the southern part of China the principal ridges appear to run from N. to S.

Forests.] Such is the cultivation diffused throughout China, that few forests remain except in the mountainous districts. Near the royal palaces there are indeed forests of great extent, but they rather bear the appearance of art than of nature.

Botany.] The number of Europeans who have been allowed to visit the interior of China is so small, and those to whom this privilege has been granted having objects of more urgency to attend to than the indigenous plants of this vast empire, we are as yet only in possession of some scattered fragments of the Chinese flora. The neighbourhood of Canton has been surveyed by Osbeck, and a meagre list of plants is to be found in Staunton's account of the English embassy there. These are almost the only authentic sources that have been hitherto opened, and are calculated rather to excite than to satisfy the botanical inquirer.

Among the trees and larger shrubs we find particularized the *thuya orientalis*, an elegant evergreen; the camphor tree, whose wood makes an excellent and durable timber, and from the roots of which that fragrant substance camphor is procured by distillation; the oleander-leaved euphorbia, a large shrub used as a material for hedges; the tallow tree, from the fruit of which a green wax is procured that is manufactured into candles; the spreading banyan tree, growing among loose rocks; the weeping willow; Spanish chesnut, and the larch. Of the fruit trees the following are the principal: China orange; the plantain tree; the tamarind; the white and paper mulberry tree; the former of these is principally cultivated for the use of its leaves, on which the silk worms are fed; and of the bark of the latter, paper, and a kind of cloth are made. Nor must the two species of the tea tree be left unnoticed, whose leaves constitute so large a proportion of the European trade with China.

Several beautiful plants grow wild in the hedges, such as the globe amaranth; the balsam; and that elegant climber *ipomea quamoclit*.

Zoology.] There are few animals peculiar to the Chinese territory. Du Halde asserts that the lion is a stranger to this country, but there are tigers, buffaloes, wild boars, bears, rhinoceroses, camels, deer, &c.* The musk deer is a singular animal of China

as well as Tibet. Among the birds many are remarkable for their beautiful forms and colours, in which they are rivalled by a variety of moths and butterflies.

Mineralogy.] Among the metals, lead and tin seem to be the rarest. China possesses mines of gold, silver, iron, white copper, common copper and mercury, together with lapis lazuli, jasper, rock crystal, load stone, granite, porphyry, and various marbles. According to some, rubies are found in China; but others assert that they come from Ava.

In many of the northern provinces coal is found in abundance. The common people generally use it pounded with water, and dried in the form of cakes.

Pekin is supplied from high mountains in the vicinity, and the mines seem inexhaustible, though coal is in general use.

Mines of silver are abundant, but little worked, from an apprehension of impeding the progress of agriculture. The gold is chiefly derived from the sands of certain mountains, situated in the western part of the provinces of Sechuen and Yunnan, towards the frontiers of Tibet. That precious metal is seldom used except by the gilders, the emperor alone having solid vessels of gold.

Tutenag, which is a native mixture of zinc and iron, seems to be a peculiar product of China, and in the province of Houquang there was a mine, which yielded many hundred weight in the course of a few days.

The copper of Yunnan, and other provinces, supplies the small coin current through the empire; but there is a singular copper of a white colour, called by the Chinese *petong*, which deserves particular notice. This metal must not be confounded with the tutenag, an error not unfrequent. It is indeed sometimes mingled with tutenag to render it softer.

CHINESE ISLANDS.

Numerous isles are scattered along the southern and eastern coast of China, the largest being those of Taiwan, also called Formosa, and that of Hainan. Formosa is a recent acquisition of the Chinese in the latter end of the seventeenth century; the natives being by the Chinese accounts little better than savages. It is divided from north to south by mountains, and the chief Chinese possessions are in the western part. It is attached to the province of Fokien, Fochen, or Footchien, in the vicinity of which it lies, E. of Canton. It contains, according to Hassel, about 22,000 square miles. Its length is from N. to S. between lat. 22 and 25 N.

The southern part of Hainan is mountainous, but the northern more level and productive of rice. In the centre there are mines of gold; and on the shores are found small blue fishes, which the Chinese esteem more than those, which we call gold and silver fish; but they only survive for a few days, when confined to a small quantity of water. This island is attached to the province of Quangtong, and lies S. W. of Canton, between lat. 18 and 20 N.

2d DIVISION.

CHINESE TARTARY.

UNDER this division of the Chinese Empire, Hassel includes the country of the Mandshurs, Montchoos, or Tunguses, and the province of Leatong, which lie N. of China Proper, bordering on the Great Wall ; the country of the Monguls on the N. W. the province of Sifan on the W. between China Proper and Tibet, and Cashgar, or Little Bucharia, N. W. of Tibet ; covering, together, 2,190,000 square miles, and peopled by 3,000,000 of souls. The inhabitants of each of these divisions, according to Hassel, have their own hereditary princes, who are subject to the Emperor of China. Except the Mahometan Buchares, these people are chiefly the followers of the Lama. They contribute to the strength of the empire nothing but troops, who themselves must be kept in subjection, by a military force.*

In the further description of this division of the Chinese Empire, we shall follow Pinkerton, whose account of it, though imperfect, and somewhat perplexed, is probably the best that can be obtained of this unexplored and obscure region.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, BOUNDARIES, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, RELIGION, GOVERNMENT, LAWS, POPULATION, DIVISIONS, ARMY, POLITICAL IMPORTANCE AND RELATIONS, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, CITIES AND TOWNS, MANUFACTURES AND COMMERCE.

Names.] THE common name of Tartary,† was originally extended over the vast regions lying between Tibet, China, and the Arctic ocean ; and from the Black Sea, in the west, to the utmost bounds of north-eastern discovery in Asia. As more precise knowledge has arisen, the northern part has acquired the name of Siberia, while the southern, in some maps of recent date, is known by the appellations of Western and Eastern Tartary. Yet even in this part, which might more properly be styled Central Asia, the Tartars properly so denominated are few ; the most nu-

* Hassel.

† Pinkerton thinks it more properly Tatary. We prefer the common spelling, however, finding no sufficient reason to change it.

merous tribes being Monguls in the west, and Mandshurs in the east.

This extensive region might therefore more properly be called Mongolia, as the greater number of tribes are Monguls ; or the western part might be styled Tartary, the middle Mongolia, and the eastern Mandshuria. The two latter are the objects of the present description ; as that of Independent Tartary will be found after the account of Persia, with which it has (as now limited) in all ages been connected.

Extent.] This wide and interesting portion of Asia, which has repeatedly sent forth its swarms to deluge the arts and civilization of Europe, extends from lon. 72° , east from Greenwich, to the 145° , a space of not less than 73° of longitude, which at the medial latitude of 45° , will yield about 3100 geographical miles. The breadth from the northern frontier of Tibet, to the Russian confines, is about 18 degrees, or 1080 geographical miles. The boundary towards Russia has been already described. The eastern boundary is the sea ; while the southern extends along the great Chinese wall, and the northern limits of Tibet. The western boundary is supplied by the celebrated mountains of Belur Tag, or the Cloudy Mountains, which divide the Chinese empire from Balk, and the Greater Bucharia ; while the range on the west of the lake Palkati separates the Kalmucs, subject to China, from the Kirguses of Independent Tartary.

Original Population.] Part of the west of this country was held by the Scythæ of antiquity, a Gothic race, who were subdued or expelled by the Tartars, or Huns, from the east, pressed on the other side by the Menguls. Beyond the latter were the Mandshurs, who, though inferior to the Monguls in power, yet retained their ancient possessions, and in the 17th century conquered China. At present the chief inhabitants are the Mandshurs of the eastern provinces ; with the tribes denominated Kalkas, Eluts, and Kalmucs, who are Monguls. The information concerning central Asia is indeed very lame and defective ; and though the late Russian travellers afford a few hints, yet the jealousy of the Chinese, and other causes, have contributed to prolong our ignorance concerning this interesting region.

Progressive Geography.] Though Ptolemy has laid down with some degree of accuracy the country of the Seres, or Little Bucharia, the progressive geography of central Asia may be said to commence with the travels of Marco Polo, in the end of the 13th century. This writer is justly regarded as the father of Tartaric geography, and his description of the countries to the north of Tibet is not a little interesting.

The more recent accounts, among which may be mentioned the travels of Gerbillon, published by Du Haide, and those of Bell, with some hints of Pallas, may be said to embrace but small portions of this vast territory.* The imperfect state of knowledge

* The notes to the *Histoire Genealogique des Tatars*, Leyde, 1726, 8vo. must not be forgotten amidst the few materials.

concerning this country may be imagined, when even D'Anville has been obliged to have recourse to Marco Polo.

Historical Epochs.] The chief historical epochs of this part of Asia may perhaps be more certainly traced in the Chinese annals, than in any other documents. The first appearance of the Huns, or Tartars, may be observed in the pages of Roman history. The annals of the Monguls, the most important nation, faintly illuminates the pages of Abulgasi, whence it would appear that prior to Zingis there was only one celebrated chan named Oguz, who seems to have flourished about the 130th year of the Christian era. The reigns of Zingis and Timur are sufficiently known in general history; but the divisions of their conquests, and the dissensions of their successors, have now almost annihilated the power of the Monguls, who, being partly subject to China, and partly to Russia, it is scarcely conceivable that they can again disturb the peace of their neighbors.

Antiquities.] Few antiquities remain to illustrate the power of the Monguls; but it is probable that when this region shall be more fully explored by travellers, several tombs, temples, and other remains of antiquity may be discovered.

Religion.] The religion most universally diffused in this part of Asia, is what has been called Shamanism, or the belief in a supreme author of nature, who governs the universe by the agency of numerous inferior spirits of great power. The Kalkas were accustomed to acknowledge a living Lama, or great spirit embodied; a form of superstition which will be better illustrated in the account of Tibet.

Government.] The government was formerly monarchical, with a strong mixture of aristocracy, and even of democracy. At present it is conducted by princes who pay homage to the Emperor of China, and receive Chinese titles of honor; but many of the ancient forms are retained. Though writing be not unknown among the Monguls, yet the laws appear to be chiefly traditional.

Population.] Of the population of these regions it is difficult to form any precise ideas. As the numerous tribes subject to Russia are found, under splendid appellations, to present but a slender number of individuals, not exceeding two or three millions, it may perhaps be reasonable to infer that amidst the wide deserts and barren mountains of central Asia there do not inhabit above 6,000,000. Hassel estimates them at 3,000,000.

Divisions.] The country of the Mandshurs is by the Chinese divided into three great governments. 1. That of Chinyang, comprising Leadong, surrounded in part by a strong barrier of wood. The chief town is Chinyang, also called Mugden, by the Mandshurs, still a considerable place, with a mausoleum of Kunchi, regarded as the conqueror of China, and the founder of the reigning family.* 2. The government of Kiren-Oula, which extends far to the N. E. where there are many forests and deserts on both sides of the great river Sagalien. Kirem, the capital, stands on the

* La Croix, ii. 221.

river Songari, which falls into the Sagalien, or Amoor, and was the residence of the Mandshur general, who acted as viceroy.* 3. The government of Tsitchicar, so called, from a town recently founded on the Nonni Oula, where a Chinese garrison is stationed. The Russians call this province Daouria, from the tribe Tagouri, who possess a great part of this territory. The western boundary is the river Argoon, the frontier between Russia and China. These provinces having been the seat of the Mandshur monarchy before the conquest of China, have since that event remained subject to their ancient sovereigns.

To the west are various tribes of Monguls, as the Kalkas, those around Koko Nor, or the Blue Lake, who are also called CElets, Eluts, or Kalmucs, the terms only implying particular Mongul branches. The Eluts have been greatly reduced by two destructive wars against the Chinese, in 1720 and 1757; and the great chan has disappeared. Their country may be considered under three divisions. 1. That part called Gete even to the time of Timur, which some regard as the country of the ancient Massagetæ, towards the lakes of Palkati, Balkash or Tengis, and Zaizan. 2. Little Bucharia, so called to distinguish it from the Greater Bucharia, which is subject to the Usbekhs, a Tartaric nation: but the people of Little Bucharia are an industrious race of a distinct origin, who are little mingled with their Kalmuc or Mongul lords. 3. The countries of Turfan, to the north of the lake called Lok Nor, and that of Chamil or Hami, to the east, regions little known, and surrounded with wide deserts. Upon the whole, it may perhaps be found that the Mandshurs are the most populous race; and that the Monguls, though diffused through a vast territory, can hardly boast the name of a nation. The Kirguses, or Tartars proper of the west, are confined to a small and uncertain district; and may more properly be considered as belonging to Independent Tartary. To these Hassel adds the Cashgars, whose number he estimates at 300,000, spreading over a territory of 130,000 square miles.

Army.] It is probable that this part of the Chinese empire might muster a large, but ineffectual army; and amidst modern tactics and weapons little need be apprehended from a new deluge of Mongul barbarians. Besides, their interests are now so various and discordant, that while the empires of Russia and China exist, they can only be regarded as connected with the policy of these powerful states.

Manners and Customs.] The manners and customs of the Monguls have been already briefly described in the account of Asiatic Russia.

The Mandshurs, who here deserve particular notice, are little distinguishable in their manners from the Monguls. By the account of the Jesuits, they have no temples, nor idols, but worship a supreme being, whom they style emperor of heaven. But probably their real creed is Shamanism, or a kind of rational polytheism.

* Du Halde, iv. 7.

Language.] The three languages of the Mandshurs, Monguls, and Tartars, radically differ from each other; the former of which appears to be the most learned and perfect of the Tartaric idioms.

Literature.] Of the native literature of the Mandshurs, little is known, except that a code of laws was drawn up by the order of one of the monarchs, prior, it is believed, to the conquest of China. The imported literature, by the translation of Chinese works, must be considerable.

Cities and Towns.] This extensive portion of Asia contains several cities and towns, generally constructed of wood, and of little antiquity or duration. These shall be briefly mentioned, passing from the west towards the east.

In Little Bucharia appear the cities of Cashgar, Yarkand, Kotun, and Karia. Cashgar was formerly a remarkable town, giving name to a considerable kingdom, the limits of which nearly corresponded with Little Bucharia.* This town, though fallen from its ancient splendor, still retains some commerce. Yarkand stands on a river of the same name, which, after a long easterly course, falls into the lake of Lop.

Turfan, the capital of a detached principality, is a considerable town, which used to be frequented by the merchants passing from Persia to China. Hami, Chami, or according to others Chamil, gives name to a small district in the immense desert of Cobi: it is a small, but populous place, about half a league in circumference, with two beautiful gates. It stands in a fertile plain, watered by a river, sheltered by hills on the N. Some towns occur farther to the south, but seemingly are only usual stations for tents, the Monguls preferring the nomadic life.

To the east of the great desert, and near the frontiers of China, several Mongul towns appear in the maps. Coucou seems to be the Couchan of Du Halde, a small town seated on a hill near a river, which falls into the Hoan-ho. The others are yet more inconsiderable.

The country of the Mandshurs contains many villages and cities, as Hotun Sagalian Oula, so called from its position on that river, in the country of the Tahouria, modernized Daouria; likewise Tsitchikar, with Merguen, Petouna, Kirin Oula, and Ningouta. On the north and east of the great river Amoor, scarcely the vestige of a village appears. Of those here enumerated, Petouna or Pedne was, in the time of Du Halde, chiefly inhabited by Mandshur soldiers and exiles, under the command of a lieutenant general. Nincouta was also the residence of a Mandshur general, and the seat of a considerable trade, particularly in the celebrated plant called ginseng, which abounds in the neighborhood. Sagalian Oula† Hotun, signifies the city of the black river, and is the chief Mandshur settlement on that noble stream.‡

* Histoire des Tatars, 388.

† In the Mandshur language, Oula signifies a river, as in the Chinese Kiang. Du Halde, iv. 530. Pira implies the same. In the Mongul, Muren is a river; illin a mountain, also Tabahan; Huta is a rock. In the Tatar, or Turkish, Tug is a mountain, Daria a river.

‡ Du Halde, iv. 19.

Trade.] The principal trade of the Mandshur country consists in ginseng, and pearls, found in many rivers, which fall into the Amoor. Excellent horses may also be classed among the exports. Cashgar was formerly celebrated for musk and gold. Their towns are rather stations for merchants than seats of commerce. But the emporia of the Russian trade with China must not be forgotten, being on the Russian side Zuruchaitu, on the river Argoon, and Kiachta ; opposite to which, on the Chinese frontier, are correspondent stations erected of wood.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Climate.] THOUGH the parallel of central Asia correspond with that of France, and part of Spain, yet the height and snows of the mountainous ridges occasion a degree and continuance of cold little to be expected from other circumstances. In climate and productions it is, however, far superior to Siberia.

Face of the Country.] The appearance of this extensive region is diversified with all the grand features of nature, extensive chains of mountains, large rivers, and lakes. But the most singular feature is that vast elevated plain, supported like a table, by the mountains of Tibet, in the south, and Altaian chain in the north, from the mountains of Belur Tag, in the west, to those that bound the Kalkas in the east. This prodigious plain, the most elevated continuous region on the globe, is intersected by some chains of mountains, and by the vast desert of Cobi, or Shamo. Destitute of plants and water, it is dangerous for horses, but is safely passed with camels. This desert extends from about the 80° of E. longitude from Greenwich, to about the 110th°, being 30° of longitude, which in the latitude of 40°, may be 1380 geographical miles : but in this wide extent are *Oases*, or fertile spots, of considerable extent. On the other hand, the main desert sends forth several barren branches in various directions.

Agriculture.] Among the southern Mandshurs, and the people of Little Bucharia, agriculture is not wholly neglected, nor is wheat an unknown harvest. The soil of so extensive a portion of the earth may be supposed to be very various ; but the predominating substance is black sand.

Rivers.] The most important river is that called by the Russians the Amur, or Amoor, by the Mandshurs, Sagalian Oula. This river has already been described.* The Russian waters of

Selinga and Irtish pervade a part of central Asia. The river of Yarkand has a considerable course before it enters the lake of Lop. The Ili, which falls into the lake of Balkash, is noted in Tartaric history.

Lakes.] Some of the lakes are of great extent, as those of Balkash or Tengis, and Zaizan, each about 150 miles in length. Next is the Koko Nor, by some called Hoho Nor, or the blue lake, which gives name to a tribe of the Monguls. *Nor* is the Mongul term for a lake, which by the Mandshurs is styled *Omo*.

Mountains.] The vast ranges of mountains which intersect central Asia have never been scientifically described, and few of them have even received extensive and appropriate appellations. On the west the great chain called Imaus by the ancients, the Belur Tag, or Dark Mountains of the natives, runs from N. to S.

In the eastern country of the Mandshurs the ridges of mountains are laid down in the same direction.

The chief difficulties attend those in the centre. Those on the Russian frontier have been well described; but of the northern mountains of Tibet, and the sources of the Ganges, our knowledge remains imperfect. Still fainter light falls on the ridges which run in an easterly and westerly direction to the north of the great desert.

The great rivers of Onon and Argoon, with others that flow in an opposite direction into the Selinga, rise from the high ridge of Sochondo, the summits of which consist of large rocks heaped on each other in successive terraces. There are two vast cavities, or abysses, with perpendicular sides, and small lakes at the bottom, which receive the melting snows, and give source to torrents which precipitate themselves with a terrible noise amidst the disjointed rocks. This ridge is clothed with perpetual snow; and, after dividing the rivers of Russian Daouria from those that flow into the Baikal, passes S. W. and joins an icy chain which runs into Mongolia.

There are some forests near the rivers; but in general the extreme elevation and sandy soil of central Asia renders trees as rare, as in the deserts of Africa.

Botany.] Of the botany of the whole central part of Asia, including the vast territories of Chinese Tartary and Tibet, we are as yet in a manner totally ignorant. No European naturalist has ever even passed through, much less explored the vegetable products of these extensive regions. From their elevated situation, and their rigorous winters, it is obvious that no tropical plants, nor even those of the more temperate Asiatic countries, are to be expected in their flora. The only indigenous plants that we are as yet certainly acquainted with, except what belong to Siberia, or India, are, that well-known and singular fern, the polypodium barometz, called also the *Scythian lamb*; panax quinquefolium, *ginseng*, the favorite drug of China; and rheum palmatum, which at least is one of the plants that furnishes the true *rhubarb*.

Zoology.] The zoology of this wide portion of the globe would supply a fruitful theme, in which the camel of the desert might

appear with the rock goat of the Alps, and the tiger with the ermine. The wild horse, and the wild ass, and a peculiar species of cattle, which grunt like swine, are among the most remarkable singularities. The wild horse is generally of a mouse colour, and small, with long sharp ears.

Mineralogy.] The mineralogy of central Asia has been little explored. Gold is found both in the eastern and western regions, and the former are also said to produce tin. As Russian Daouria exhibits so many valuable substances, it is reasonable to conclude that they equally abound in the Chinese territory, if similar skill and industry were exerted in their discovery. The mineral waters, and uncommon appearances of nature, have been little investigated.

ISLAND OF SAGALIAN, OR TCHOKA.

Till this large island was explored by the unfortunate navigator La Perouse, it was supposed to be only a small isle at the mouth of the Amoor, the southern extremity being placed by D'Anville about 4° , or 240 geographical miles, to the north of Jesso. By the account and maps of La Perouse it is only divided from Jesso by a narrow strait of about 20 miles in breadth, since called the strait of Perouse. The discovery and account of this large island, which extends from the 46° of latitude to the 54° , or not less than 480 geographical miles in length, by about 80 of medial breadth, is the most important portion of that navigator's voyage. The natives seem to approach to the Tartaric form; and the upper lip is commonly tatooed blue. The dress is a loose robe of skins, or quilted nankeen, with a girdle. Their huts, or cabins, are of timber, thatched with grass, with a fireplace in the centre. In the south are found Japanese articles. A little trade seems also known with the Mandshurs and the Russians. The native name of this large island is Tchoka, that used by the Japanese Oku Jesso, perhaps implying father Jesso; while the Russians, who only know the northern part, call it the isle of Sagalian, because it is opposite to the large river of that name. The centre is mountainous, and well wooded with pine, willow, oak, and birch; but the shores are level, and singularly adapted to agriculture. The people are highly praised by La Perouse, as a mild and intelligent race; and he expressly informs us that they are quite unlike the Mandshurs, or Chinese.

3d. DIVISION.

TRIBUTARY DOMINIONS.

THIS division of the Chinese Empire, according to Hassel, covers 776,000 square miles, and has 31,500,000 inhabitants. It embraces the following kingdoms :

<i>Kingdoms.</i>	<i>Square miles.</i>	<i>Population.</i>
Corea	88,000	1,500,000
Tibet or Tangut	370,000	12,000,000
Annæn	165,000	10,000,000
Tunquin	154,000	8,000,000
Leoo Keoo Isles.		

1. KINGDOM OF COREA.

This kingdom is on a large peninsula, N. E. of China, from which it is separated on the S. W. by the Yellow Sea. The sea of Japan on the N. E. which divides it from the Japan Isles ; on the N. lies the country of the Mandshurs. On the N. W. it borders on the province of Leautong.

Corea has for many centuries been tributary to China. It has its own king ; its chief city is Kinkatao, of which we know only the name. Its productions are, gold, silver, iron, beautiful yellow varnish, white paper, ginseng, with small horses about 3 feet high, furs and fossil salt. This country boasts a considerable population. According to Hassel it amounts to 1,500,000. All commerce with this little kingdom is prohibited, of course little is known of its former or present state.

2. TIBET, OR TANGUT.

This extensive kingdom lies W. of China, and N. of Hindooostan, and borders on both. It covers according to Hassel, 370,000 square miles, and has a population of 12,000,000. It embraces the empire of the Dela Lama, the empire of the Teshoo Lama, the rajahship of Bootan, the rajahship of Nepaul, or Nipal, and the kingdom of Setchuen. Such are Hassel's divisions ; who observes, that the principal parts of Tibet are governed by priests of the Budhistic order ; Dalai Lama governs at Lassa ; Teshoo Lama, at Tishulamba ; Rajah Daeb, who is a Lama, at Bootar. Since the year 1792, Nepaul and Segwin have been under the protection of China.

As the latest and most full and authentic account of this vast interior and imperfectly explored region of Asia, we give the following from Pinkerton.

TIBET.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, BOUNDARIES AND PROVINCES, PROGRESSIVE GEOGRAPHY, RELIGION, GOVERNMENT, POPULATION, MANNERS, LITERATURE, CITIES AND TOWNS, MANUFACTURES AND COMMERCE.

THE account of the interesting country of Tibet must unfortunately be limited in the topics, as the materials are far from being ample. The recent narrative of Captain Turner's journey shall be selected as the most authentic : but it only embraces a small part, and for the general geography, recourse must be had to more antiquated authorities. Tibet, with its numerous independencies, may in fact be still arranged among the *undiscovered* countries in the centre of Asia.

Names.] The name of *Tibet*, which is probably Hindoo or Persian, is in the country itself, and in Bengal, pronounced *Tibbet*, or *Tibt*. But the native appellation is *Pue*, or *Pue Koachim*, said to be derived from *Pue*, signifying northern, and *Koachim*, snow ; that is, the snowy region of the north.*

Extent.] According to the most recent maps, Tibet extends from about the 75th to the 101st degree of longitude, which in the latitude of 30° may be about 1350 geographical miles. The breadth may be regarded as extending from the 27th to the 35th degree of latitude, or about 480 geographical miles.† The original population has not been accurately examined.

Boundaries and Provinces.] There is every reason to believe that the northern boundary of this country may be safely extended two degrees farther than it appears in our best maps, in which there is no portion of Great Tibet to the N. E. of Cashmir.

Tibet is divided into three parts, Upper, Middle, and Lower. Upper Tibet chiefly comprises the province of Nagari, full of horrible rocks, and mountains covered with eternal snow. Middle Tibet contains the provinces of Shang, Ou, and Kiang : while the provinces of Lower Tibet are Takbo, Congbo, and Kahang.

Many of these provinces are again subdivided : Nagari for instance, is considered as a kingdom of three departments, Sangkar, Pourang, and Tamo. Shang is on the West, bounded by Nepaul. The province of Ou contains Lassa, the capital of Tibet. Kiang is to the north-east of Ou ; and is inhabited by mingled Tibetans and Monguls in tents. Kahang is in the S. E. bordering on the Birmans, and is divided into twelve departments.

* Turner, p. v. and 305.

† Probably to 37 degrees, which would add 120 geographical miles : for Mus Tag is, according to the Russians, the northern boundary of Tibet : and they place that range in 38 degrees.

'To these must be added the wide region of Amdoa, if it be not the same with Kahang, but it seems more probably to embrace the confines towards China, as the natives are remarkably ingenious, and speak the Chinese language. The country of Hor is situated betwixt Tartary and the provinces of Nagari and Kiang, and seems to be the Hohonor of our maps. Our Bootan is by the natives styled Decpo, or Takbo : all the countries to the west of which, as Moringa, or Morung, Mocampour, Nepaul, Gorca, and Kemaoon, are not considered as parts of Tibet. The confusion of Chinese, Mongul, and Tibetan appellations, has been a great impediment in the geography of this extensive country ; the N. E. part of which was, with the Chinese province of Shensi, before the great wall was extended in this quarter, the celebrated Tangut of oriental history and geography. On the western side high mountains, covered with perpetual snow, and with all the terrible avalanches, and other features of the Swiss Alps, have in all ages prevented the Persians and the conquerors of Bucharia from invading this country ; while the deserts in the N. E. have proved ineffectual barriers against the Monguls and Eluts. These western mountains have also prevented travellers from penetrating in that quarter, which is little better known at present than in the time of Ptolemy.

Progressive Geography.] The progressive geography of Tibet chiefly dates from a recent period ; for there is no room to believe that the snowy mountains of Tibet had been penetrated by the ancients. The Portuguese commerce with the East Indies may be said to have first disclosed this ample region, of which, however, our knowledge, even at this day, is lamentably defective. Tibet seems to have been the southern part of the Tangut of Marco Polo,* who describes the province of *Tebeth*, (which he says contained eight kingdoms, with many cities and villages,) as a mountainous country, producing some gold and spices, a large breed of dogs, and excellent falcons.

About 1715, the Emperor of China being desirous to obtain a map of Tibet, two Lamas were sent who had studied geometry in a mathematical academy.† These Lamas drew a map from Sining, in the province of Shensi, to the sources of the Ganges ; which was afterwards examined by the Jesuits, and improved by them, so far as their materials would admit. This map, published in the atlas of Du Halde's work, unfortunately continues almost the sole authority, and is followed, with a few variations, by the most recent geographers. Yet it seems but of doubtful credit ; and reasonable suspicions may be entertained from there being no distinct names of small kingdoms, states, or provinces, though from recent accounts, these seem particularly to abound in the country ; and from the great river Gogra being totally unknown and omitted.

The geography of Asia cannot be said to be complete till we have new and correct maps of the central parts, particularly of

* Cap. xxxvi. edit. 1537.

† Du Halde, iv. 571.

Tibet, which may be called the heart of Asia, whence the streams flow into the vast southern regions of that extensive country. The sources of the Ganges and Indus, the Sampoo, and all the prodigious and fertile streams of exterior India, and of China, belong to this interesting region ; and must be exactly traced and delineated before we can have precise and scientific ideas of Asiatic geography.

History.] The Lama of Tibet was probably the Prester John of the middle ages ; and this strange appellation was as strangely transferred by Portuguese ignorance, to the Emperor of Abyssinia. Polo informs us that Tibet had been ravaged by the Monguls, so that in his time it was almost desolate. The quiet succession of the lamas would afford few materials for history ; and the petty secular chiefs* of distinct provinces, or kingdoms, may perhaps sometimes be traced in the Chinese or Hindoo annals, but would little interest an European reader. As the tombs and monasteries are often constructed of stone, some may remain of remote antiquity. But the idols, cut in the rocks, are little calculated to impress travellers with the idea of much perfection in the arts.

Religion.] The religion of Tibet seems to be the schismatical offspring of that of the Hindoos.† It is reported to have received its earliest admission in that part of Tibet bordering upon India, (which from hence became the seat of the sovereign lamas;) to have traversed over Mantchieux Tartary, and to have been ultimately disseminated over China and Japan. It still bears a very close affinity with the religion of Brahma in many important particulars, but differs materially in its ritual, or ceremonial worship. Tibetans assemble in chapels, and unite together in prodigious numbers to perform their religious service, which they chant in alternate recitative and chorus, accompanied by an extensive band of loud and powerful instruments ; so that these congregations forcibly recal to the recollection both the solemnity and sound of the Roman Catholic mass.

There are also numerous monasteries, containing crowds of *gylongs*, or monks, with a few *annees*, or nuns.

Government.] The ruling government is the spiritual, though the lama was accustomed to appoint a *tipa*, or secular regent, a right which has probably passed to the Chinese emperor. The laws, like the religion, bear some affinity to that of the Hindoos.

Population.] We have already mentioned Hassel's estimate. Pinkerton differs widely from his. From the ease with which their conquest was effected by the Eluts, and other circumstances,

* Yet Tibet was for some time subject to secular kings, called Tsan Pa ; and the lama resided at Lassa, with a power similar to that of the spiritual prince of Japan. Those Monguls, called Eluts, conquered the secular prince, and transferred the whole power to the lama. (Du Halde, iv. 50.) In 1792, the Nipalese having committed great ravages in Tibet, the Emperor of China sent an army to protect the lama ; in consequence of which the Chinese have established military posts on the frontiers, so that the intercourse between their country and Bengal is now precluded. Turner, 441.

† Turner, p. 306.

it can scarcely be conceived that a monarch of all Tibet could have brought into the field an army of more than 50,000 ; and allowing that (exclusive of the numerous monks) only every tenth person assumed arms, the population would be half a million, a circumstance which will not surprise those who consider that a few families in central Asia assume the name of a nation. But this number is probably far too small ; and it can only be said that the population seems scanty.

Revenues.] The revenues of the lama, and of the secular princes, seem to be trifling ; nor can Tibet ever aspire to any political importance. In a commercial point of view, friendship and free intercourse with Tibet might open new advantages to the English settlements in Bengal ; and in this design repeated envoys to the lama were sent by Mr. Hastings, a governor attentive to the interests of his country.

Character, &c.] Mr. Turner represents the character of the Tibetans as gentle and amiable. The men are generally stout, with something of the Tartaric features, and the women of a ruddy brown complexion, heightened like the fruits, by the proximity of the sun, while the mountain breezes bestow health and vigor.

"The ceremonies of marriage are neither tedious nor intricate in Tibet.* Their courtships are carried on with little art, and quickly brought to a conclusion. The priests of Tibet, who shun the society of women, have no share in these ceremonies, or in ratifying the obligation between the parties, which, it seems, is formed indissolubly for life."

It is a remarkable characteristic of the country, that polygamy here assumes a different form from that of other oriental regions ; the women being indulged in a plurality of husbands, instead of the reverse. It is the privilege of the elder brother to select a wife, who stands in an equal relation to his other brothers, whatever may be their number.†

Such is the respect paid to the lama, that his body is preserved entire in a shrine ; while those of the inferior priests are burnt, and their ashes preserved in little hollow images of metal. But in general the dead bodies are exposed to the beasts and birds of prey, in walled areas ; and an annual festival is held, as in Bengal and China, in honor of the dead.

A curious idea of the manners and customs of the Tibetans may be formed from Mr. Turner's account of his interview with the lama, then an infant, not capable of speech ; for, in the spirit of the eastern metempsychosis, they suppose that the soul of the lama passes from his late body into another, which they discover by infallible marks.

Upon the whole, the Tibetans appear to have made a considerable progress in civilization ; but the sciences continue in a state of imperfection, the year for instance being lunar, and the month consisting of 29 days.

Literature.] The literature is chiefly of the religious kind, the

* Turner, p. 352.

† Du Halde and Turner.

books being sometimes printed with blocks of wood, on narrow slips of thin paper, fabricated from the fibrous root of a small shrub. In this practice they resemble the Chinese; while the Hindoos engrave their works with a steel stylus upon the recent leaves of the palmyra tree, (*borassus flabelliformis*,) affording a fibrous substance, which seems indestructible by vermin.* The writing runs from the left to the right, as in the languages of Europe.

The gylongs, or monks, pass through a regular education; and, it is to be supposed, sometimes teach children not destined to religious confinement.

Cities and Towns.] Of the cities and towns of Tibet little is known. The capital is Lassa; and several other names in the southern part assume the character of towns in the maps, though probably mere villages. There being little commerce, there is no middle class of people, but the transition is rapid from the miserable hut to the stone palace, or monastery.

Lassa, the capital of Tibet, is situated in a spacious plain, being a small city, but the houses are of stone, and are spacious and lofty.† The noted mountain of Putala, on which stands the palace of the Lama, is about seven miles to the east of the city. As *La* means a hill in the native tongue, this name may imply the hill of Pouta or Boodh. To the north of Lassa appears another vast range of mountains, covered with snow. Lassa is in the province of Ou, and almost in the centre of Tibet.‡

Edifices.] Among the edifices, the monasteries may be first mentioned. Mr. Turner describes that of Teshoo Loomboo, as containing three or four hundred houses, inhabited by monks, besides temples, mausoleums, and the palace of the sovereign pontiff. The buildings are all of stone, none less than two stories in height, with flat roofs, and parapets composed of heath and brushwood, probably to emit the melting snow. The centre window projects beyond the wall, and forms a balcony. Some of the palaces and fortresses are described and delineated by Mr. Turner; and the architecture seems respectable. Bridges occur of various fantastic forms; sometimes consisting of chains, drawn from precipice to precipice; sometimes of beams, one end being fixed in the shore, while the other successively increases its projection till the uppermost timbers support a short passage of planks, thus resembling the upper section of an octagon. The roads amidst the rocky mountains resemble those of Switzerland, and are particularly dangerous after rain.

Manufactures.] The chief manufactures of Tibet are shawls, and some woollen cloths; but there is a general want of industry; and the fine-undermost hair of the goats, from which shawls are manufactured, is chiefly sent to Cashmir. The principal exports are to China, consisting of gold dust, diamonds, pearls, lamb skins, some musk, and woollen cloths. Many of the Chinese imports are manufactured articles. To Nepaul, Tibet sends rock salt, tin-cal, or crude borax, and gold dust; receiving in return base sil-

* Turner, 323.

† Rennell, 306.

‡ Bernoulli, iii. 227.

ver coin, copper, rice, and coarse cotton cloths. Through Nepaul is also carried on the chief trade with Bengal, in gold dust, tincal, and musk. The returns are broadcloth, spices, trinkets, emeralds, sapphires, lazulite, jet, amber, &c. With Asam in the S. E. there is no intercourse ; and the little trade with Bootan, may rather be regarded as internal.

Trade.] The trade with China, which is the principal, is chiefly conducted at the garrison town of Sining, in the western extremity of the province of Shensi, where tea is eagerly bought by the Tibetans. There is no mint in Tibet, as such an institution is prevented by religious prejudices ; but the base silver of Nepaul is current throughout the country.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SOIL, RIVERS, MOUNTAINS, ZOOLOGY, MINERALOGY, NATURAL CURIOSITIES.

Climate.] "IN the temperature of the seasons in Tibet, a remarkable uniformity prevails, as well as in their periodical duration and return. The same division of them takes place here as in the more southern region of Bengal. The spring is marked, from March to May, by a variable atmosphere ; heat, thunder storms, and occasionally with refreshing showers. From June to September is the season of humidity, when heavy and continued rains fill the rivers to their brim, which run off from hence with rapidity, to assist in inundating Bengal. From October to March, a clear and uniform sky succeeds, seldom obscured either by fogs or clouds. For three months of this season a degree of cold is felt, far greater, perhaps, than is known to prevail in Europe. Its extreme severity is more particularly confined to the southern boundary of Tibet, near that elevated range of mountains, which divides it from Asam, Bootan, and Nepaul."*

Thus the distinguishing characteristic of the climate is that extreme dry and parching cold, which, under the latitude of 26, near the torrid zone of antiquated geography, rivals that of the Alps, in latitude 46.

Face of the Country.] Tibet Proper exhibits only low rocky hills, without any visible vegetation, or extensive arid plains of an aspect equally stern ; while the bleak and cold climate constrains the inhabitants to seek refuge in sheltered vales and hollows, or amidst the warmest aspects of the rocks. Yet Tibet produces great abundance and variety of wild fowl and game ; with numerous flocks of sheep and goats, and herds of cattle, and is infested by many beasts of prey. Tibet Proper must indeed be con-

* Turner, 300.

sidered as a mineral country, the mountains presenting a peculiarly naked aspect, indicative of rich ores.

Soil.] The nature of the soil here prohibits the progress of agriculture. The vales are commonly laid under water on the approach of winter; in the spring they are plowed and sown, while frequent showers, and a powerful sun, contribute speedily to mature the crops.* The autumn being clear and tranquil, the harvest is long left to dry on the ground, and when sufficiently hardened, is trod out by cattle. The course of cultivation is wheat, peas, and barley; rice being confined to a more southern soil.

Rivers.] The chief river of Tibet is, beyond all comparison, the Sampoo, or Berhampooter, which rising in the western region, from the same lofty mountains that give source to the Ganges, proceeds in an E. and S. E. direction for about the space of 1000 English miles, to the confines of Tibet and Asam, where it bends S. W. and flows into the estuary of the Ganges, after a farther course of about 400 British miles.

The Hoan Ho, and Kian Ku of the Chinese, also derive their origin from the eastern boundaries of Tibet. Of the other rivers little is known; but the great Japanese river of Cambodia, or Maykaung of Laos; that of Nou Kia, supposed to pass near Martaban, into the gulf of Pegu; and the Irrawady of this last country, are all believed to derive their sources from the mountains of Tibet, which may be styled the Alps of Asia. Nor must it be forgotten that another large river, called the Sardjoo, or Gagra, which after a course of about 600 miles, nearly parallel on the E. with that of the Ganges, joins it near Chupra, also derives its spring from the lofty western mountains of Tibet.

Lakes.] These Alpine regions contain, as usual, many lakes, the most considerable being represented under the name of Terkiri, about 80 miles in length, and 25 broad. The Chinese lamas, have also depicted many other lakes in the northern parts of the country; where there certainly exists one very singular, which yields the tincal or crude borax. Equally uncommon is the lake to the S. of Lassa, which our maps call Jamdro or Palté. This strange lake is represented as a wide trench, of about two leagues broad, every where surrounding an island of about twelve leagues in diameter; if true, a singular feature of nature. Even the smaller lakes in the south of Tibet Proper are in the winter frozen to a great depth.

Mountains.] The vast ranges of Tibetan mountains have already been repeatedly mentioned; but there is no accurate geographical delineation of their course and extent. Those in the west and south seem to bend in the form of a crescent, from the sources of the Ganges to the frontiers of Asam, in a N. W. and S. E. direction. To the north of Sampoo a parallel and yet higher ridge seems to extend, the northern extremities abounding with large frozen lakes. The chief elevation appears as usual to be central, to the south of the lake Terkiri, being called Koiran.

* Turner, 354.

From these great ranges many branches extend N. and S. as in the Alps, and their names may perhaps be traced, but with little accuracy, in the general map of Tibet, and atlas of the provinces, drawn up by D'Anville from the sketches of the missionaries, and already repeatedly quoted.

Forests.] Many parts of Tibet abound with forests containing many European trees, and others peculiar to Asia. The high snowy mountains, which contain the sources of the Ganges, are perhaps barren of vegetation, a character generally applicable to Tibet Proper.

Zoology.] Tibet abounds with game of various descriptions. The horses are of a small size, or what we term ponies, but spirited to a degree of obstinacy. The cattle are also diminutive. The flocks of sheep are numerous, commonly small, with black heads and legs; the wool soft, and the mutton excellent. It is a peculiarity of the country that the latter food is generally eaten raw. When dried in the frosty air it is not disagreeable in this state, to an European palate.*

The goats are numerous, and celebrated for producing a fine hair, which is manufactured into shawls, and which lies beneath the exterior coarse coat. Nor must the singular breed of cattle be forgotten, called Yak by the Tartars, covered with thick long hair; the tail being peculiarly flowing and glossy, and an article of luxury in the east, where it is used to drive away the flies, and sometimes dried for ornaments. These cattle do not low; but, when uneasy, make a kind of grunting sound, whence the breed is called the *bos grunniens*.

The musk deer delights in intense cold. This valuable animal has two long curved tusks, proceeding downwards from the upper jaw, which seem intended to dig roots, his usual food. The figure of the body somewhat resembles the hog, while the hair approaches the quills of the porcupine. The musk, which is only found in the male, is formed in a little tumour at the navel; and is the genuine and authentic article so styled, being commonly black, and divided by thin cuticles.†

The lakes abound with water fowl in the summer, many of which may perhaps be new to zoology; and little is discovered concerning the fish and insects of this singular country.

Mineralogy.] The mineralogy is better known from the account appended to Mr. Turner's Journey in 1783, from which it appears that Tibet Proper abounds with rich minerals. Gold is found in great quantities, sometimes in the form of dust, in the beds of rivers, sometimes in large masses, and irregular veins. There is a lead mine, two days journey from Teshoo Lumboo, the ore being galena. Cinnabar, rich in quicksilver, is also found; and there are strong indications of copper. Rock salt is another product of Tibet. But in general the metals cannot be worked, as there is a complete deficiency of fuel; and coal would be far more precious than gold.

* Turner, 302.

† Ib. 200.

The most peculiar product of Tibet is tincal, or crude borax, concerning which Mr. Sanders, who accompanied Mr. Turner, gives the following interesting information. "The lake, from whence tincal and rock salt are collected, is about fifteen days journey from Teshoo Lumboo, and to the northward of it. It is encompassed on all sides by rocky hills, without any brooks or rivulets near at hand ; but its waters are supplied by springs, which being saltish to the taste are not used by the natives. The tincal is deposited or formed in the bed of the lake ; and those who go to collect it dig it up in large masses, which they afterwards break into small pieces for the convenience of carriage, exposing it to the air to dry. Although tincal has been collected from this lake for a great length of time, the quantity is not perceptibly diminished ; and as the cavities made by digging it soon wear out, or fill up, it is an opinion with the people that the formation of fresh tincal is going on. They have never yet met it in dry ground, or high situations, but it is found in the shallowest depths, and the borders of the lake ; which deepening gradually from the edges towards the centre, contain too much water to admit of their searching for the tincal conveniently ; but from the deepest parts they bring rock salt, which is not to be found in the shallows, or near the bank. The waters of the lake rise and fall very little, being supplied by a constant and unvarying source, neither augmented by the influx of any current, nor diminished by any stream running from it. The lake, I was assured, is at least 20 miles in circumference ; and, standing in a very bleak situation, is frozen for a great part of the year. The people employed in collecting these salts are obliged to desist from their labour as early as October, on account of the ice. Tincal is used in Tibet for soldering, and to promote the fusion of gold and silver. Rock salt is universally used for all domestic purposes in Tibet, Bootan, and Nepaul."*

Mineral waters.] There are many mineral waters in various parts of this extensive country ; nor is their salutary use unknown to the natives.

3. BOOTAN.

This country may be regarded as a southern province of Tibet, and occupies, according to Mr. Rennell, at least a degree of latitude between Bengal and Tibet. Its capital, Tassaseudon, is in N. lat. 27° 43'. Paridrong, in lat. 28°, is a frontier town in Tibet, bordering on Bootan. This province is bounded E. by Asam ; S. by Bengal ; W. by Nepaul. It is a mountainous country. The southernmost ridge of its mountains rises near $1\frac{1}{2}$ mile perpendicular above the plains of Bengal, in a horizontal distance of 15 miles ; and from the summit, the plains below appear like a vast ocean, to the eye of the beholder. Through this ridge, there are but few passes, and all fortified. Between Tassaseudon and Paridrong, is a chain of still higher mountains, visible from the

* Turner, 406.

plains of Bengal, at the distance of 150 miles, covered with snow. These are the Himmaleh mountains, which lie N. of Nepaul, and Mr. Rennell supposes them to be, in point of elevation, equal to any mountains of the old hemisphere. With all its mountains, however, Bootan is covered with constant verdure, and abounds in forests of lofty trees. The oak of Europe is wanting. The sides of the mountains are cultivated by the hand of industry, and crowned with orchards, fields, and villages. Among its few wild animals, are monkeys and pheasants. Mr. Turner visited this country in 1783, and says, it contains no metal, except iron and a little copper. Compared with Tibet Proper, its climate is mild, though its winters are severe. The inhabitants resemble the Chinese, and are a species of the Tartarie race.

The government of Bootan is vested in a prince called Daeb, whose authority is neither stable nor extensive.

4. THE RAJAHSHIP OF NEPAUL, OR NIPAL.*

BOUNDRARIES, EXTENT, POPULATION, CHARACTER, RELIGION, HISTORY, GOVERNMENT, ANCIENT LITERATURE, CITIES, CLIMATE, PRODUCTIONS, RIVERS, MOUNTAINS, ANIMALS, MINERALOGY.

Boundaries.] NEPAUL is bounded on the N. by the Himmaleh mountains, which separate it from Tibet. E. by the province of Bootan. S. by the provinces of Bahar and Oude in Hindooostan, and W. by Kemaoon.

Extent.] The valley of Nepaul is a plain of an oval figure, about 200 miles in circuit, lying between lat. 27° and $28^{\circ} 6'$ N.

Population.] There are several populous cities within the valley, and a great number of villages; but the whole population cannot be ascertained with any accuracy. It is stated, however, vaguely, at half a million.

Character.] Two distinct races of men with different languages and religion inhabit Nepaul. The first and most numerous race consists chiefly of the two superior classes of Hindoos, the Brahmins and the Cshatriyas; the other is distinguished by the name of Newars. The former compose the army and engross all places of power and trust. In their character they do not differ materially from their brethren in Hindooostan. The Newars are represented as robust and healthy, though in some of the valleys they are subject to swellings in the throat, similar to those of the inhabitants of Switzerland. Their character bears so striking a resemblance to that of the Chinese, as to leave little doubt of their origin. Like them they are peaceable and timid in a remarkable degree. They are skilled in the same art, and their houses are built in the

* The information contained in the following description of Nepaul was derived from the review of Colonel Kirkpatrick's account of this kingdom, which he visited in 1793. The Rev. Dr. Buchanan visited this secluded country in 1806; but his journal, which doubtless is very interesting, for reasons unknown to us, has not yet been published, nor is there any notice taken of this country in his Researches.

same style. Like them too, they are exceedingly jealous of strangers. The food of the peasantry, and indeed of the bulk of the inhabitants, is very simple, consisting chiefly of milk, honey, rice, fruits and vegetables. Animal food and spirituous liquors are prohibited. Judicial astrology is held in great estimation by the Newars. Their favourite pursuit is that of consulting their destiny at the temples.

Religion.] The popular religion of Nepaul does not differ materially from the Hindooism established in Bengal. It prohibits the use of all animal food, except that of the Buffaloe, on which they are allowed to feed by special indulgence. Nepaul abounds in temples and idols. There are almost as many temples as houses, and as many idols as inhabitants. Sixteen remarkable festivals are annually celebrated, some of which occupy so much time, that scarce a day passes without the public performance of a religious ceremony. They have besides a grand occasional festival, which lasts 4 months. It consists in visiting the shrines of all the gods in Nepaul, which are said to be 2733.

History.] The Newars, it is supposed, are Chinese, who settled in Nepaul, according to their own accounts, about 900 years ago. The Brahmins and other Hindoos, probably, immigrated at different times since that period, from the plains below. Nepaul was originally divided into 3 districts, governed by as many Rajahs.

In 1769, the Rajah of Gorka, a neighboring prince, defeated each of the three Rajahs, and got complete possession of the whole of Nepaul. Thus he united the 2 countries under one government, which has continued in his family ever since.

In 1792 the Rajah of Nepaul acknowledged himself a tributary to the Emperor of China, reserving to himself, however, the right to exercise sovereign power within his own dominions.

Government.] The government of this province is vested in a Rajah, or Sovereign, and a body of chieftains, known by the name of Thurgurs. The sovereign is deemed to be originally the absolute proprietor of all lands; and in him, and a council composed of the principal ministers of government, is vested not only the power of disposing of these lands at pleasure, but of punishing and rewarding public officers according to their merits, and of bestowing government and military commands. This council meet annually, and exercise the despotic power with which they are entrusted, in the most arbitrary manner. The condition of the lower class of people under such a government is truly deplorable. The peasantry of Nepaul are dragged from their houses by the officers of government, for the purpose of assisting those employed in the public service; and they are not unfrequently deprived of their lands at the moment they are about to reap their harvest. The Dhurma-Shaster forms the basis of civil and criminal jurisprudence in Nepaul, as well as in Hindooostan. Most offences, according to this code, are punishable by fine.

Ancient Literature.] There is probably no place in India where a search after ancient and valuable manuscripts would be

more successful than in Nepaul. In this secluded valley the revolutions and contentions, which have affected the other parts of India, have had no influence.

Cities.] The three principal cities are Catmandu, Lelit Pattan, and Bhatgung. The first containing 180,000, the second 240,000, and third 120,000 inhabitants. The houses are generally built of brick, and 3 or 4 stories high. The streets are paved with brick or stone. At Catmandu, the residence of the Rajah and the court, is the royal palace. The temples are said to vie in splendor with those of the most populous and flourishing cities of Christendom. One of these, near Lelit Pattan, is described as peculiarly magnificent : the court is paved with blue marble, inlaid with flowers of bronze. Beside these cities there are some towns of importance. That of Cirtipour is represented as very considerable. Bhatgung, though inferior in point of size, exceeds all the rest in its palace and buildings.

Climate.] The climate may be compared with that of the south of Europe ; sometimes a sprinkling of snow, and now and then a hoar frost covers the ground. The inhabitants have the means of varying the climate by ascending the heights from a heat equal to that of Bengal, to the cold of Russia. The rains set in about the middle of April, and break up in October, during which time the valley is occasionally inundated. This country is generally healthful, excepting a narrow tract, which runs along the southern border, called the Turyani, where the infectious vapor arising from the swampy ground, generates putrid fevers.

Productions.] The peach, the raspberry, the walnut, and mulberry, grow spontaneously. Their oranges are superior to those of Silket, and are probably not surpassed by any in the world. Their pine apples are excellent. Rice is much cultivated. They have turnips, cabbages, and peas, but all of them indifferent; other vegetables good. The Turyani is very rich and fertile, abounding with extensive forests. The pines and saul trees, which grow there, are not perhaps surpassed by any in the world for straightness or dimensions. Besides timber for masts and yards, great quantities of pitch, tar, and turpentine might be drawn from this fertile spot.

Rivers.] Several tributary branches of the Ganges take their rise here, all of which unite at the S. E. part of the valley, and rush through a breach in the mountains upon the plains of Hindooostan. The Hindoo records represent the valley of Nepaul as having been originally a great lake. This account is rendered highly probable by the fact, that Nepaul is every where surrounded by mountains, excepting a narrow spot at the S. E. corner. If this were once stopped, we can easily conceive that the valley must speedily assume the appearance of a magnificent lake.

Mountains.] The valley of Nepaul is surrounded by mountains, whose common height is 8000 feet above the level of the sea. On the north are the mountains of Himmaleh, supposed to equal in height any of the old hemisphere. Their snowy tops are visible from the plains of Bengal, at the distance of 150 miles. An infe-

rior range forms the southern boundary. In this there are few remarkable eminences.

Animals.] The swampy tract, called the Turyani, abounds with elephants, tigers, leopards, buffaloes, and all the wild and ferocious beasts of India. The Yak of Tartary, known in India by the name of Chowin, and the Changra, or Shawl-goat of Cashmir, are also natives of Nepaul. They have sheep with 4 horns, which are the common beasts of burden.

Mineralogy.] Nepaul was once supposed to abound in rich gold mines. This however, is not the case. They have mines of copper, from which India was once supplied. Their iron is not surpassed in goodness. They have plenty of marble, and other stone for building, also good limestone and slate.

The other division of Hassel, viz. the kingdom of *Setchuen* or *Segwin*, is included in some of the divisions of Pinkerton, under a different name. This name is not to be found on any of our English maps.

5. KINGDOM OF ANNAN.

This kingdom lies between the gulfs of Siam and Tunquin, on the S. W. and N. E.; on the S. E. is the China sea; on the N. W. and N. are Siam and Laos. According to Hassel, this kingdom covers 165,000 square miles, and has 10,000,000 inhabitants. It includes the counties of

Cambodia, Ciampa, and Cochin China.

Though the king of this country is a vassal of the Chinese Emperor, he is nearly independent. Modern accounts say, that Tonquin has become subject to the king of Annan. His finances are very considerable. He maintains 113,000 land troops, 30,000 of whom are disciplined according to European tactics; and 26,800 seamen.*

CAMBODIA

Is the northern province in this kingdom, and is about 400 miles long by 150 broad. Parts of it border on the gulf of Siam and the Indian ocean. Like Siam it is enclosed by mountains on the E. and W. and is fertilized by a large river, variously called Mecon, Camboge, and Japanese, which begins to inundate the country in June. Its mouth by some is represented as full of low isles and sand banks, which impede the navigation; by others as navigable by ships of the largest size for 49 miles. Its port and town is Saigong, 40 miles from the sea, where there is an extensive naval arsenal. A great part of the coast of this country is covered with under wood, and very low. The sea coast in some parts is so shallow, that at the distance of 5 or 6 miles from the shore, the water is seldom more than 4 fathoms deep, and no vessel larger than a boat can approach within two miles of the shore. The air is so hot, that the inhabitants are obliged to reside on the banks of the rivers and lakes, where they are tormented by musquitos.

* Hassel.

The soil is fertile, and produces abundance of corn, rice, excellent legumes, sugar, indigo, opium, camphor, and various medicinal drugs. The most peculiar product is the Camboge gum, which yields a fine yellow tint. Ivory also, and silk, are very plentiful, and of little value. The gold of this country is said to be very pure ; and it furnishes amethysts, hyacinths, rubies, topazes, and other precious stones. Cattle, particularly of the cow kind, are numerous and cheap. Elephants, lions, tygers, and almost all the animals of the deserts of Africa, are found in Cambodia. It has several precious woods, and a particular tree, in the juice of which they dip their arrows ; and it is said, that though a wound from one of the arrows proves fatal, the juice itself may be drank without danger. The country, though fertile, is very thinly peopled, insomuch that the king is hardly able to assemble 30,000 men : and its trade is inconsiderable. The inhabitants are Japanese, Chinese, and Malays, together with some Portuguese, who live without priests, and have intermarried with the natives. The men are generally well made, of a dark yellow complexion, with long black hair ; their dress is a long loose robe, the dress of the women is shorter and closer. They manufacture very fine cloth, and the needle work of the females is much admired. Their religion is idolatry.

CIAMPA.*

Ciampa, another province of this kingdom, lies south of the desert of Cochin China, and east of Cambodia, bordering south on the China or Indian sea. As seen from the ocean, it appears like a sandy tract, intersected with rocks. The inhabitants are said to be large, muscular, and well made, have reddish complexions, flat noses, and black hair, their dress very slight. Feneri is their capital, where their chief resides, who is tributary to Cochin China. The country produces cotton, indigo, and silk. Their junks, or boats, are well built, and employed in fishing.

COCHIN-CHINA.

This is the largest and most important division of the kingdom of Annan. It is long and narrow, extending from lat. 8° 40', to about 20° N. and from 20 to 60 miles broad. On the N. it is separated from Tunquin by the river Sungen ; on the W. a range of mountains separates it from the kingdom of Laos and Cambodia. On the E. and S. it borders on the China Sea. It is divided into 12 provinces, which succeed each other from N. to S. all bordering E. on the China Sea. The whole country is intersected by rivers, which facilitate inland commerce.

The climate is healthy, its heat being tempered by sea breezes. The rainy seasons are September, October, and November, when the low country is overflowed by torrents from the mountains, fertilizing the soil, which yields three crops of grain in the year. All

* Ciampa, Siampa, or Tsiampa, as it is variously called.

the fruits of India are found here in the greatest perfection, with many of those of China.*

This country has been torn for years past by divisions. From the year 1790 to 1800,† its rightful sovereign, *Caun-shung*, enjoyed only two years peace. These, however, were employed, under the auspices of the excellent bishop Adran, in making improvements in his country. He established manufactories of salt-petre, pitch, tar, resin, and fire arms ; opened roads of communication between principal towns, and lined the roads with trees, for shade and ornament. He encouraged the culture of the areca nut, betel pepper, silk, and sugar cane ; opened a mine of iron ore, and erected iron works ; organized his military forces, and established military schools on the European plan ; constructed 300 large gun-boats, 5 luggers, and a frigate, on the French plan, and taught his naval officers the use of signals. In 1800 an English gentleman saw a fleet of 1200 sail, under the command of the prince of this country, in fine order, and under excellent discipline. During this interval of peace, he undertook a reform in the system of jurisprudence, abolished tortures, mitigated punishments which were too severe ; established public schools, to which parents were compelled to send their children, at the age of 4 years ; issued regulations to promote commerce ; caused bridges to be erected over rivers, ordered the sea coast and harbors to be surveyed, and placed buoys and sea marks, to guard against rocks and shoals, and sent missionaries into the western, mountainous districts of his dominions, to civilize their barbarous inhabitants.

In short, this excellent prince, by his own indefatigable application to the arts and manufactures, roused, by his example, the energies of his people, and has effected an almost unexampled reformation in his country. In 10 years, from a single vessel, he accumulated a fleet of 1200 ships, 3 of which were on European construction. This prince professes a veneration for the doctrines of christianity, and tolerates all religions in his dominions.

The military strength of this exemplary, intelligent, and enterprising prince, in 1800, according to Barrow, consisted of 113,000 land forces, and 26,800 mariners ; in the whole 139,800 men, who are active, vigorous, and well disciplined.

The inhabitants of this country go bare legged, and generally bare footed ; their hair is twisted in a knot, and fixed on the crown of the head. Their houses, in general, consist of 4 mud walls, covered with thatch. These people are gay and talkative. The women are entrusted with the chief concerns of the family, and engage in the various employments connected with agriculture, manufactures, commerce, and naval affairs, in all which they take an active and laborious part. The men are employed in war, fishing, felling timber, building ships, &c. but are addicted to idleness and amusements. Polygamy is here practised, and gross licentiousness prevails. Both sexes are coarsely featured, of a dark complexion, with red lips, and black teeth, occasioned by

* Asiatic Register, iii. 84.

† Barrow.

chewing areca and betel. They are fond of theatrical amusements, and cock-fighting, and are expert in playing at foot-ball, shuttlecock, and leaping. They are sturdy beggars, and addicted to theft.

They excel in naval architecture, and have abundance of the best ship timber. Their country is well situated for commerce. The best harbor is that of Turon, which affords a safe retreat for ships of any burden. The principal exports from this country are silks, sugar of the best kind, ebony, Calamboe wood, edible bird's nests, which are found in plenty on the islands on this coast, gold in dust, or bars, copper, and porcelain, which is brought from China and Japan. The articles received in return, are salt-petre, sulphur, lead, fine cloths, and chintzes. Pearls, amber, and coral, were formerly in demand. The traders of Cochin-China value themselves on being able to cheat an European.

The written language of Cochin-China is correctly that of China; but the language spoken is a corruption of the Chinese.

Their religion is a modification of the doctrine of Budha, but more simple, and less involved in mystery. From a sentiment of gratitude to the benevolent spirit, they offer to the image of the protecting Deity, the firstlings of their living flocks, and of the fruits of the earth. The people are very superstitious. The priests are reckoned the best physicians, but they have more skill in charms, than in medicines.*

December, January and February, are cold and moist, presenting the semblance of an European winter. The inundations only last two or three days, but happen once a fortnight in the rainy season. Borri's account is that the rains only continue for three days regularly in each fortnight: if true, a singular phenomenon. March, April, May, form a delicious spring; while the heat of the three following months is rather excessive.

The horses are small, but active: there are also mules and asses, and innumerable goats. The products of agriculture are rice of different qualities, yams, sweet potatoes, greens, pumpkins, melons. Sugar also abounds. Gold dust is found in the rivers; and the mines yield ore of singular purity. Silver mines have also been lately discovered. Both metals are used in ingots, as in China.

Mr. Pennant mentions tigers, elephants, and monkeys, as abounding in Cochin-China.

The Paracles form a long chain of small islands with rocks and shoals, parallel to the coast of Cochin-China.

4. KINGDOM OF TUNQUIN.

This country is divided from the former by a small river, and may at present be considered as incorporated with it by conquest. It contains 154,000 square miles, and 8,000,000 inhabitants.† The inhabitants resemble their neighbors the Chinese, but their manners are not so civilized. The products are numerous, and seem

* Barrow.

† Hassel.

to blend those of China with those of Hindooostan. While the rivers in Cochin-China are of a short course, those of Tunquin spring from the mountains of Yunnan ; and in the rainy season, from May to September, inundate the adjacent country. The chief is the Holi Kian, which, after receiving the Lisien, passes by Kesho, the capital. This city is described by Dampier, as approaching the Chinese form, with a considerable population. There is no recent description of this country.

5. THE LEOO KEEO ISLES.

The isles of Leoó-keeo, between Formosa and Japan, constitute a little civilized kingdom, governed by an hereditary king, tributary to China. These isles are said to be thirty-six in number, but very inconsiderable, except the chief, which is properly and peculiarly called Leoó-keeo ; by the Chinese accounts the length of it is about 125 miles, nearly twice the extent which is assigned in recent maps. These isles were discovered by the Chinese in the 7th century ; but it was not till the 14th that they became tributary to China. The emperor Kiang-hi, about A. D. 1720, ordered a temple to be erected to Confucius in the chief island, with a literary college. The language is said to differ from that of China or Japan ; but the civilization seems to have proceeded from the latter country, as the Japanese characters are commonly used. The people are mild, affable, gay, and temperate ; and the chief products are sulphur, copper, tin, with shells, and mother of pearl.



JAPAN.*

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAMES, EXTENT, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS AND ANTIQUITIES, RELIGION, GOVERNMENT, LAWS, POPULATION, COLONIES, ARMY, NAVY, REVENUES, POLITICAL IMPORTANCE AND RELATIONS, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, CITIES AND TOWNS, EDIFICES, ROADS, INLAND NAVIGATION, MANUFACTURES AND COMMERCE.

THE kingdom, or, as it is by some styled, the empire of Japan, has by most geographers been classed among the Asiatic isles, and has in consequence been treated with more brevity than

* Having no new information of this Empire, Pinkerton's account is copied.

its importance demands ; for, excepting China, no existing Asiatic monarchy can aspire to superior rank, or is more calculated to excite rational curiosity, from the singularity of its government, abundant population, progress in the arts of life, and peculiar manners of the people. The Japanese islands may in some measure be compared with Great Britain and Ireland, forming a grand insular power near the eastern extremity of Asia, like that of the British isles, near the western extremity of Europe. Nor are ample modern materials wanting in the travels of Kämpfer and Thunberg.

Names.] Marco Polo, the father of modern Asiatic geography, mentions Japan by the name of Zipangri or Zipangu. The inhabitants themselves call it Nipon, or Nifon, and the Chinese Sippon and Jepuen.

Extent.] This empire extends from the 30th to the 41st degree of N. latitude ; and, according to the most recent maps, from the 131st to the 142d degree of E. longitude from Greenwich. Besides many smaller isles, it presents two considerable ones in the S. W. that of Kiufu (also termed Saikof, or the western country), and that of Sikokf. But by far the most important island is that of Nipon, to the N. E. of the two former. The geography of Kämpfer has been corrected by recent voyagers, according to which the length of Kiufu from N. to S. is about two degrees, or 140 miles ; the greatest breadth about 90. Sikokf is about 90 miles in length, by half the breadth. The grand isle of Nipon is in length from S. to N. E. not less than 750 miles ; but is so narrow in proportion, that the medial breadth cannot be assumed above 80, though in two projecting parts it may double that number. The Japanese Empire, according to Hassel, contains 189,000 square miles. These islands are divided into provinces and districts, as usual in the most civilized countries.

To the N. of Nipon is another large isle, that of Jesso, or Chicha, which having received some Japanese colonies, is generally regarded as subject to Japan ; but being inhabited by a savage people, is rather considered as a foreign conquest, than as a part of this civilized empire.

Original Population.] The original population of Japan has been little illustrated ; but the Japanese seem to be a kindred race with the Chinese, though, according to Kämpfer, the languages be radically distinct. But if compared with that of Corea, the nearest land, and the latter with the Chinese, perhaps a gradation might be observable. The Japanese may have migrated from the continent, when both the Chinese and themselves were in the earliest stages of society ; and the complete insular separation may have given rise to a language rendered peculiar by the progress of a distinct civilization.

Progressive Geography.] Before the account published by Kämpfer, Japan had been imperfectly explored by the Portuguese ; and since 1730, the date of Kämpfer's publication, many important improvements have been made.

Historical Epochs.] The history of their own country is uni-

versally studied by the Japanese ; and Kämpfer has produced an elaborate abstract, divided into three epochs, the fabulous, the doubtful, and the certain.

The first is wholly fictitious. The second, or uncertain epoch, is by Kämpfer interwoven with the Chinese history ; this part of his work, demonstrating that the Japanese themselves at least acknowledge their government and civilization to have been derived from China. Sin Noo, one of these Chinese monarchs admitted by the Japanese into their annals, is represented with the head of a bull, or with two horns, as having taught the use of agriculture and herds ;* perhaps the simple and natural origin of the Jupiter Ammon, and similar images of classical antiquity.

The third, or certain period, begins with the hereditary succession of the ecclesiastical emperors, from the year 660 before the Christian era, to the year of Christ 1585, during which 107 princes of the same lineage governed Japan. At the last period the secular princes assumed the supreme authority. In general the reigns are pacific ; though at very distant intervals the Mandshurs and Coreans occasionally invaded Japan, but were always defeated by the valor of the inhabitants. In the reign of Gouda, the nineteenth Dairi, or spiritual emperor, the Monguls, under Mooko, attempted a grand invasion of Japan, after having conquered China, about fourteen years before. The number of small vessels is exaggerated to 4000, and that of the army to 240,000 ; and it is probable that numerous Chinese junks contained a formidable army of Monguls. But they were dispersed, and almost wholly destroyed by a furious tempest, which the Japanese piously ascribed to the gods, their protectors. In 1585, the generals of the crown, or secular emperors, who were also hereditary, assumed the supreme power ; the Dairis being afterwards confined, and strictly guarded, that they might not reassume their ancient authority.

Antiquities.] The temples and palaces being constructed of wood, few monuments of antiquity can remain. Some of the castles of the nobility have walls of earth or stone ; but the most ancient relics are probably the coins and idols.

Religion.] The established religion of Japan is a polytheism, joined with the acknowledgment of a supreme creator. There are two principal sects, that of Sinto and that of Budsdo. The first acknowledge a supreme being, far superior to the little claims and worship of men, whence they adore the inferior deities as mediators, the idea of a mediator being indispensable in almost every form of religion. They abstain from animal food, detest blood-shed, and will not touch any dead body.†

The priests are either secular or monastic ; the latter alone being entrusted with the mysteries. The festivals and modes of worship are cheerful and even gay ; for they regard the gods as beings who solely delight in dispensing happiness. Besides the first day of the year, and three or four other grand festivals, the

* Kämpfer, i. 231. French translation.

† Thunberg, iv. 19.

first day of the month is always kept as a holiday. There are several orders of monks and nuns, as in the Roman Catholic system; but human nature is every where the same.

The sect of Budsdo was imported from Hindostan, being the same with that of Budha, or Boodh, reported to have been in Ceylon about 1000 years before the birth of Christ. Passing through China and Corea it has been mingled with foreign maxims, but the tenet of the metempsychosis remains: wicked souls being supposed to migrate into the bodies of animals, till they have undergone a due purgation.

Soon after the discovery of this country by the Portuguese, missionaries of the Jesuits arrived in 1549; and their successors continued to diffuse their doctrine till 1638, when 37,000 Christians were massacred. Several persecutions had formerly taken place, and in 1590, upwards of 20,000 are said to have perished. The pride and avarice of the Portuguese conspired with the vain ambition of the Jesuits, (who, not contented with their station, endeavoured to introduce themselves into the governing councils of the nation,) first to contaminate and render odious the religion which they professed, in its pure principles essentially opposite to such views, and afterwards to produce this melancholy catastrophe; the existence of the Christian faith being through such perversion found incompatible with that of a state otherwise universally tolerant. Since that memorable epoch Christianity has been held in supreme detestation; and the cross, with its other symbols, are annually trampled under foot; but it is a fable that the Dutch are constrained to join in this ceremony.

Government.] The Kubo, or secular emperor, is now sole monarch of the country; but till near the end of the 17th century, the Dairis, pontiffs, or spiritual monarchs, held the supreme authority, being appointed by the high ecclesiastical court, according to their laws of succession. Yet occasionally the appointment has been controverted; and Japan has been ravaged by many civil wars. The ecclesiastical dignities were of six orders, some belonging to particular offices, others merely honorary. The secular prince is accustomed to confer, with the consent of the dairi, two honorary ranks, equivalent to noblemen and knights. The ecclesiastical court is chiefly occupied with literary pursuits, the Dairi residing at Miaco; and his court remains, though not in its former splendor.

The government of each province is entrusted to a resident prince, who is strictly responsible for his administration, his family remaining at the emperor's court, as hostages; and he is himself obliged to make an annual appearance, the journey being performed with great pomp, and accompanied with valuable presents. The emperor, as in the feudal times of Europe, derives his chief revenue from his own estate, consisting of five inferior provinces, and some detached towns. Each prince enjoys the revenues of his fief, or government, with which he supports his court and military force, repairs the roads, and defrays every civil expense. The princes of the first dignity are styled Daimio,

those of inferior rank Siomio. They are generally hereditary, but the Siomios are not only obliged to leave their families at Jedo, the capital, but to reside there themselves for six months in the year. The singular constitution of Japan therefore consists of an absolute hereditary monarchy, supported by a number of absolute hereditary princes; whose jealousy of each other's power conspires, with domestic pledges, to render them subservient to one supreme.

Laws.] The superiority of the laws of Japan over those of Europe has been loudly proclaimed by Kämpfer. The parties themselves appear, and the cause is determined without delay. Yet Kämpfer's information on this head is defective, as he does not mention any code of laws. Thunberg informs us that the laws are few, but rigidly enforced, without regard to persons, partiality, or violence.* Most crimes are punished with death, but the sentence must be signed by the privy council at Jedo. Parents and relations are made answerable for the crimes of those whose moral education they ought to have superintended. The police is excellent, there not only being a chief magistrate of each town, but a commissary of each street, elected by the inhabitants to watch over property and tranquillity. Two inhabitants, in their turn, nightly patrol the street to guard against fire.

The best proof that the laws are salutary is, that few crimes are committed, and few punishments are inflicted. The brief code, according to Thunberg, is posted up in every town and village, in large letters, on a spot surrounded with rails.†

Population.] The population of the Japanese empire, like that of other Asiatic states, cannot be treated with much precision. Ancient and modern travellers seem to have passed this subject in silence. Perhaps the Japanese have some prejudice against any enumeration, or choose, from political views, to bury it in obscurity; while the Chinese, with like design, may perhaps magnify the population of their country. All travellers however agree that the population is surprising, and though a great part of the country be mountainous, yet even the mountains are the objects of obstinate cultivation. Hassel estimates the number of inhabitants in this empire at 15,000,000; and its army at 100,000. Thunberg observes that the capital, Jedo, is said to be 63 miles in circumference, and at any rate rivals Pekin in size.‡ Many of the villages are three quarters of a mile in length; and some so long that it requires several hours to walk through them; and these large villages frequently occur at very short distances. Kämpfer says that the number of people daily travelling on the highways is inconceivable, and the *tokaido*, the chief of the seven great roads, is sometimes more crowded than the most frequented streets of European capitals.§ Varenius, the geographer, who justly esteemed this country so interesting as to deserve a particular description, has, from the best authorities, estimated the standing army maintained by the princes and governors, at 368,000

* iv. 64.

† Thunberg, iv. 72.

‡ iii. 282.

§ ii. 345, and iii. 318.

infantry, and 38,000 cavalry : while the Kubo emperor, maintains 100,000 foot, and 20,000 horse : thus constituting in all a regular force of 468,000 infantry, and 58,000 cavalry.* It is probable that this army does not bear a greater proportion to the population, than that of an European state in time of peace ; and as the army doubles that of France under the monarchy, so the population may also be double. Perhaps a more safe estimate may be formed, by supposing the population of Japan to equal that of China ; and the former country being about one tenth part the size of the latter, the population will be about 50,000,000.

Colonies.] Though the national laws prohibit emigration, yet where the Japanese make conquests, they seem to regard the country as their own, and to form settlements without hesitation. Hence Japanese colonies may be found in Jesso, and other adjacent isles : nay even in isles of the Indian Archipelago, so that their laws, as in China, seem rather theoretic.

Army.] The army has been already mentioned as amounting to more than half a million ; and the character of the people is singularly brave and resolute. The navy, like that of the other oriental powers, is beneath notice. The Japanese vessels are open at the stern, so that they cannot bear a boisterous sea ; and though, like the Chinese, they have the use of the compass, yet it is inconceivable how they could in former times, make voyages, as is asserted, to Formosa, and even to Java.

Revenues.] The revenues of this empire are minutely stated by Varenius, according to princes and provinces, the sum total being 2834 tons of gold, on the Flemish mode of computation ; and taking the ton at only 10,000l. sterling, the amount would be 28,340,000l. sterling, besides the provinces and cities which are immediately subject to the emperor.† These revenues must not, however, be considered as national, being only yielded in coin to the various princes. The emperor, however, besides the large revenues of his provinces, has a considerable treasure in gold and silver, disposed in chests of 1000 taels, or thayls, each being nearly in value to a Dutch rix dollar, or about four shillings and four-pence English money. As the frenzy of mankind generally expends the public revenue in the support of an army, the real weight of the Japanese resources may best be estimated from the numerous army supported.‡

Political Importance and Relations.] Japan maintains no political relations with any other state ; and consisting of islands without a navy, its external political importance is of course confined, if not annihilated.

Manners and Customs.] A recent traveller has described the persons of this singular people in the following terms.§ “ The

* Deser. Jap. cap. ix.

† Hassel states the revenue at 424,500,000 guilders.

‡ Thunberg iv. 8, computes the revenue of the crown lands at more than forty-four thousands of millions of sacks of rice, each sack being about twenty pounds weight. But this calculation implies nothing to an European reader.

§ Thunberg, iii. 251.

people of this nation are well made, active, free and easy in their motions, with stout limbs, although their strength is not to be compared to that of the northern inhabitants of Europe. They are of a yellowish color all over, sometimes bordering on brown, and sometimes on white. Ladies of distinction, who seldom go out in the open air without being covered, are perfectly white. It is by their eyes that, like the Chinese, these people are distinguishable. These organs have not that rotundity which those of other nations exhibit; but are oblong, small, and are sunk deeper in the head, in consequence of which these people have almost the appearance of being pink-eyed. Their eyes are dark brown, or rather black; and the eyelids form in the great angle of the eye a deep furrow, which makes the Japanese look as if they were sharp sighted, and discriminates them from other nations. The eyebrows are also placed somewhat higher. Their heads are in general large, and their necks short; their hair black, thick, and shining, from the use they make of oils. Their noses, though not flat, are yet rather thick and short."

This highly civilized people must of course display great diversity of character, but the virtues far preponderate over the vices; and even their pride is useful, as it prevents them from stooping to the mean tricks of the maritime Chinese. The Japanese use great varieties of food and sauces. The master or mistress of the house is not harassed with the trouble of carving, the meat being previously cut into small pieces, served up in basins of porcelain, or japanned wood. The general drink is sacki, or beer made of rice; which last article also supplies the place of bread. They use many kinds of vegetables and fruits. The use of tea is also universal; but wine and spirituous liquors are unknown. The use of tobacco seems to have been introduced by the Portuguese; and the practice of smoking has become general.

The houses of the Japenese are of wood, colored white, so as to resemble stone: and though roomy and commodious, never exceed two stories in height, the upper serving for lofts and garrets, and are seldom occupied.* Each house forms but one room, which may be divided into apartments at pleasure, by moveable partitions, sliding in grooves. They use neither chairs nor tables, sitting on straw mats, the meal being served apart to each on a small square wooden salver. In Jedo, the houses are covered with tiles; but the general fabric is a frame work of wood, split bamboos, and clay.

The dress consists of trowsers: and what we call night gowns, or loose robes of silk or cotton, are universally worn by both sexes.* These are fastened by a girdle; the number being increased according to the coldness of the weather. Stockings are not used; and the shoes are commonly of rice straw. The men shave the head from the forehead to the nape, but the hair on the side is turned up and fastened at the crown of the head: conical

* Thunberg, iii. 112.

† Id. iii. 267.

hats made of grass are worn on journeys, but the fashion of wearing the hair forms the common economical covering of the head.

The Japanese festivals, the games and theatrical amusements, equal those of most civilized nations.

Language.] Thunberg has published a curious vocabulary of the Japanese language, which seems indeed to have little connection with the monosyllabic speech of the Chinese. There are also dictionaries drawn up by the Jesuits.

Literature.] In the sciences and literature the Japanese yield to few of the oriental nations. This sensible people study house keeping, or domestic economy, as an indispensable science; and next to this every Japanese is versed in the history of his country.* Astronomy is cultivated, but has not arrived at much perfection. They survey with tolerable accuracy; and their maps are as exact as their imperfect instruments will permit. The art of printing is ancient, but they use blocks, not moveable types, and only impress one side of the paper. Some of their arts and manufactures even surpass those of Europe. There are excellent workmen in iron and copper; and to no eastern country do they yield in manufactures of silk and cotton; while in varnishing wood they are well known to have no equals. Glass is also common; and they even form telescopes. The porcelain is deemed superior to that of China. Their swords display incomparable skill; and many varieties of paper are prepared from the bark of a species of mulberry tree.

Education.] There are many schools in which the children are taught to read and write; their education being accomplished without the degradation of personal chastisement, while courage is instilled by the repetition of songs in praise of deceased heroes.

Cities and Towns.] The capital city of the Japanese empire is Jedo, centrically situated on a bay in the S. E. side of the chief island Nipon. The houses never exceed two stories, with numerous shops towards the streets. The harbor is so shallow that an European ship would be obliged to anchor at the distance of five leagues. A fire happened in this city in the year 1772, which is said to have consumed six leagues in length, and three in breadth: and earthquakes are here familiar, as in other regions of Japan. The emperor's palace is surrounded with stone walls, and ditches with draw bridges, forming of itself a considerable town, said to be five leagues in circumference.† In this, and similar instances of oriental population and extent, though the best authorities be followed, yet the reader may, with the author, suspend his belief. The Japanese affirm that Jedo would occupy a person twenty-one hours to walk round its circumference, which might thus amount to about twenty-one leagues: and that it is seven leagues in length by five in breadth. A large river passes through the capital, and besides the wide ditches of the palace, supplies several canals. There are no walls nor fortifications, which are unknown in Japanese cities: but there are many splendid houses of the numerous princes.

* Thunberg, iv. 54.

† Id. iii. 139.

Miaco, the spiritual capital, and second city of the empire, is placed in an inland situation about 160 miles S. W. from Jedo, on a plain. Yet it is the first commercial city, and is celebrated for its manufactures. It is also the seat of the imperial mint : and the Dairi's court being literary, all books are printed here. Kæmpfer informs us that, upon an enumeration taken in 1674, the inhabitants were found to amount to 405,642, of whom were males 182,070 ; and 223,572 females, without including the numerous attendants of the Dairi.

Nagasaki, being the nearest city to the Dutch factory in the isle of Dezima, has of course attracted the particular attention of travellers. The harbor is the only one in which foreign ships are permitted to anchor, a privilege now enjoyed only by the Dutch and Chinese. The Portuguese trade raised this place from a mere village, to its present size and consequence.

The other cities in the Japanese empire amount to about thirty or forty ; but, except those on the route from Nagasaki to the capital, few have been explored by European travellers. Osacca, and Sakai, boast the name of imperial cities.

Edifices.] Of the principal edifices of the Japanese some idea may be formed from the descriptions given by travellers of the imperial palace, which, like those of the Chinese, consists of many dwellings, occupying an immense space. The saloon of the hundred mats is 600 feet in length, by 300 in breadth. There is a high square tower (a mark of dignity not permitted here to the grandees, though usual at their own courts,) which consists of several stages richly decorated ; and most of the roofs are ornamented with golden dragons. The pillars and ceilings are of cedar, camphor, and other precious woods ; but the only furniture consists of white mats, fringed with gold. The emperor gives audience in a smaller chamber, where he is seated on carpets.

The roads seem to be maintained in excellent order ; but the mountainous nature of the country has prevented the formation of canals, which indeed the universal proximity of the sea renders almost unnecessary ; otherwise so sensible and industrious a nation would doubtless have imitated the Chinese example.

Manufactures and Commerce.] The chief manufactures of Japan have been already mentioned in the account of arts and sciences. The inland commerce is very considerable, being free and exempted from imposts.* The harbors are crowded with large and small vessels ; the high roads with various goods ; and the shops well replenished. Large fairs are also held in different places, to which there is a great concourse of people. The trade with China is the most important, consisting of raw silks, sugar, turpentine, drugs, &c. while the exports are copper in bars, lacquered ware, &c. Thunberg represents the profits of the Dutch trade as very inconsiderable, so that the company only employed two ships. The Japanese coins are of remarkable form, the gold being called Kobangs. The silver, called Kodama, sometimes

* Thunberg, iv. 106.

represents Daikok, the god of riches, sitting upon two barrels of rice, with a hammer in his right hand, and a sack at his left. The Seni, of copper or iron, are strung like the Chinese pieces of a similar value.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, VOLCANOES, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, ISLES.

Climate and Seasons.] THE heat of summer in Japan is extreme, and would be insupportable, were it not for the sea breezes. Equally severe is the cold in winter, when the wind blows from the north, or north-east. The weather is changeable throughout the year ; and there are abundant falls of rain, especially in the *satsaki*, or rainy months, which begin at midsummer.* This copious moisture is the chief cause of the fertility of Japan, and its consequent high degree of population.

Thunder is not unfrequent ; and tempests, hurricanes, and earthquakes, are very common. Thunberg has published his thermometrical observations, from which a clear idea may be formed of the climate. The greatest degree of heat, at Nagasaki, was 98°, in the month of August ; and the severest cold in January 35°. The thunder in the summer months is generally during the night ; and the snow will remain on the ground some days, even in the south.

Face of the Country.] Though there be plains of considerable extent, as appears from the description of Miaco, yet Thunberg assures us that the whole country consists of mountains, hills, and vallies, the coast being mostly rocky and precipitous, and invested with a turbulent sea. The face of the country is also diversified with many rivers, and rivulets, by numerous singular tribes of vegetation ; and generally excites the social ideas of industry, more calculated perhaps to delight the heart, than the wild appearances of deserted nature. The soil in itself may be said to be rather barren ; but the prolific showers conspire with labor and manure to overcome even this obstacle. Agriculture is a science in the highest estimation with this sensible people, so that except the most barren and untractable mountains, the earth is universally cultivated ; and even most of the mountains and hills. Free from all feudal and other impediments, and highly respected by other social classes, the farmer cultivates the soil with freedom and industry. There are no commons ; and if any portion be left uncultivated it may be seized by a more industrious

* Thunberg, iii. 234.

neighbor. The Japanese mode of manuring is to form a mixture of excrements of all kinds, with kitchen refuse, which is carried in pails into the field, and poured with a ladle upon the plants, when they have attained the height of about six inches, so that they quickly receive the whole benefit. The weeding is also carried to the utmost degree of nicety.

The sides of the hills are cultivated by means of stone walls, supporting level plats sown with rice or esculent roots. "Thousands of these beds adorn most of their mountains, and give them an appearance which excites the greatest astonishment in the breasts of the spectators."

Rice is the chief grain ; buck wheat, rye, barley, and wheat, being little used. The sweet potatoe is abundant ; with several sorts of beans and pease, turnips, cabbage, &c. The rice is sown in April, and gathered in November : in which last month the wheat is sown, and reaped in June. The barley also stands the winter. From the seed of a kind of cabbage, lamp oil is expressed, and several plants are cultivated for dyeing ; there are also cotton shrubs, and mulberry trees, which last feed abundance of silk worms. The varnish and camphor trees, the vine, the cedar, the tea tree, and the bamboo reed, not only grow wild, but are planted for numerous uses.

Rivers.] The rivers of Nipon have not been delineated with much care. Among the few named are the Nogasa, and the Jedogawa, which passes by Osaka, where it is crowned with several bridges of cedar, from 300 to 360 feet in length. The river Ojin-gawa is one of the largest and most dangerous in the country, though not subject like the others to swell during rains. Fusi-gawa is also a large and rapid river, as is that called Sakgawa. The largest river seems to be the Jodo, or Yodo, which flows S. W. from the central lake of Oitz ; but our geography of the Japanese empire is far from being complete. Among the most important rivers Kämpfer names the Ujin (the Ojin of Thunberg), the Oomi reported by the Japanese history to have burst from the ground in one night, and the Aska.*

Lakes.] One of the chief lakes is that of Oitz, which emits two rivers, one towards Miaco, the other towards Osaka, and it is said to be 50 Japanese leagues in length, each about an hour's ride on horseback ; and the breadth is considerable.

Mountains.] The principal Japanese mountain is that of Fusi, covered with snow almost throughout the year. The Faconie mountains are in the same quarter, surrounding a small lake of the same name.† Many of the mountains are overgrown with wood ; and others cultivated as before explained. There are several volcanoes, and in general they abound with evergreen trees, and crystalline springs.

Volcanoes.] Near Firando there is a volcanic island, nor are others unknown in the surrounding seas.‡ In the province of Figo there is a volcano, which constantly emits flames, and another, former-

* Thunberg, i. 163.

† Ib. iii. 164.

‡ Kämpfer, i. 166.

ly a coal mine, in the province of Tsikuser. The course and extent of the various ranges of mountains have not been indicated.

Near the lake of Oitz is the delightful mountain of Jesan ; which is esteemed sacred, and is said to present not less than 3000 temples.*

Forests.] In the high state of cultivation, few forests can appear, except those already mentioned, as decorating the sides of mountains.

Botany.] The vegetable treasures of Japan are numerous, and have been ably explored by Kämpfer and Thunberg ; on account however, of the enormous population of the country, and the absolute necessity of paying the utmost attention to the introduction of whatever may contribute to human sustenance, it is not easy to ascertain how far several of the esculent plants cultivated here are truly indigenous. There are many points of resemblance between the floras of China and Japan, and this similarity has probably been strengthened by a mutual interchange of useful vegetables ; if indeed both countries have not rather derived some of their most valuable plants from Cochin-China, or the Phillipine islands ; the ginger, the soy-bean, black pepper, sugar, cotton, and indigo, though perhaps natives of the more southern regions of Asia, are cultivated here with great success, and in vast abundance. The Indian laurel, and the camphor tree, are found in the high central parts of Japan, as is also the rhus vermix, from the bark of which exudes a gum resin, that is supposed to be the basis of the exquisitely beautiful and inimitable black varnish, with which the inlaid cabinets and other articles of Indian luxury are covered. Besides the common sweet, or China orange, another species, the citrus japonica is found wild, and almost peculiar to this country ; two kinds of mulberry are met with, both in an indigenous and cultivated state, the one valuable as the favorite food of the silk worm, the other esteemed for the white fibres of its inner bark, which are manufactured into paper. The larch, the cypress, and weeping willow, found in all the warm regions between Japan and the Mediterranean, here arrive at the extremity of their boundary to the east ; the same may be said of the opium, poppy, white lily, and jalap. The trumpet-flower (*bignonia catalpa*) is common to this part of Asia, and Peru ; in which circumstance it resembles the *vanilla*, whose berries form an article of commerce, being largely used in the preparation of chocolate. The tallow tree, the plantain, the cocoa-nut tree, and two other palms, the *chamærops excelsa*, and *cycas circinalis*, adorn the woodland tracts, especially near the shore, by the variety of their growth and foliage, while the uncultivated swamps by the sides of the rivers are rendered subservient to the uses of the inhabitants, by the profusion and magnitude of the bamboos with which they are covered.

Zoology.] It is not a little remarkable that neither sheep nor goats are found in the whole empire of Japan ; the latter being

* Kämpfer ii. 28.

deemed mischievous to cultivation, while the abundance of cotton recompenses the want of wool. Swine are also deemed pernicious to agriculture ; and only a few appear in the neighborhood of Nagasaki, probably introduced by the Chinese.* There are in general but few quadrupeds ; the number of horses in the empire being computed by Thunberg, as only equal to those of a single Swedish town. Still fewer cattle are seen ; and the Japanese neither use their flesh nor their milk, but employ them only in ploughing or drawing carts. The food consists almost entirely of fish and fowl, with vegetables. Hens and common ducks are domesticated, chiefly on account of their eggs. A few dogs are kept from motives of superstition ; and the cats are favorites of the ladies.

The wolf appears in the northern provinces, and foxes in other parts ; these last being universally detested, and considered as demons incarnate.

Mineralogy.] "That the precious metals of gold and silver are to be found in abundance in the empire of Japan, has been well known, both to the Portuguese, who formerly exported whole ship loads of them, and to the Dutch in former times. Gold is found in several parts, and perhaps Japan may in this respect contest the palm with the richest country in the world : but in order that this metal may not lose its value, by becoming too plentiful, it is prohibited to dig more than a certain stated quantity ; not to mention that no metallic mine, of any kind whatever, can be opened and wrought without the emperor's express permission. When this permission is obtained two thirds of the produce are the portion of the emperor, and the proprietor of the land receives one third for the expenses. The finest gold, together with the richest gold mines, are found on the largest of the Nipon islands near Sado. It is used for the mint, gilding, and embroidery ; but is not carried out of the country.

"Silver must formerly have been found in much greater plenty than at present, as a large quantity of it was then exported from this country. The Japanese consider it as being more rare than gold, although the latter metal is dearer. It is said to be found in the province of Bingo ; and in the more northerly parts towards Kattami, very rich silver mines are to be met with. Independently of these places, the two islands, which are called the gold and silver isles, (*Ginsima, Kinsima,*) are said to contain a great quantity of both of these precious metals. Silver is used for coining and for plating.

"Copper is quite common in every part of the empire, and is richly impregnated with gold, constituting the main source of the wealth of many provinces. It was not only formerly exported in amazing quantities, but still continues to be exported both by the Dutch and Chinese merchants. The finest and most malleable is dug in Suruga, Atsingo, Kyno, Kuni. The last sort is esteemed to be the most malleable of any ; whilst that from Suruga contains

* Thunberg, iv. 95.

the greatest quantity of gold. Of this metal are made small pieces of money for change; it is used likewise for plating and for making utensils, such as pots, kettles, &c.

"Iron seems to be scarcer than any other metal in this country. This they are neither fond of importing, nor yet of exporting it for sale. Of it they manufacture scymitars, arms, scissars, knives, and various other implements, of which they stand in need."

"Brimstone is found in great abundance in Japan. Pit coal is likewise to be met with in the northern provinces."*

Here are several warm mineral waters, which the inhabitants use for various diseases; particularly those of Obamma, and those in the mountain of Omfen. The natural curiosities of Japan have been little investigated, as Europeans have seldom visited the interior of the country.

[Isles.] There are many small isles dependent on Japan, particularly in the S. and E.; among which is Fatsifo, the place of exile for the grandees. This and the other small isles are scarcely known, except by name.

THE BIRMAN EMPIRE.†

COMPRISING THE KINGDOMS OF AVA, PEGU, AND ARRACAN.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAME, EXTENT, BOUNDARIES, ORIGINAL INHABITANTS, PROGRESSIVE GEOGRAPHY, MODERN HISTORY, RELIGION, LAWS, GOVERNMENT, POPULATION, ARMY, NAVY, REVENUES, POLITICAL IMPORTANCE, MANNERS, LANGUAGE, LITERATURE, CITIES, EDIFICES, MANUFACTURES, COMMERCE.

Name.] BEFORE the appearance of a recent interesting publication,‡ scarcely any thing was known concerning this new empire; and geographers were constrained to detail the old accounts, which are little satisfactory. The Birman empire derives its name from the Birmahs, who have been long known as a warlike nation in the region formerly styled INDIA BEYOND THE GANGES; the capital city of their kingdom being Ava, or Awa. Pegu is by the natives styled Bagoo;§ being the

* Thunberg, iv. 102.

† The account of this Empire, with few additions, is from Pinkerton.

‡ Symes's account of the Embassy to Ava.

§ Ib. i. 6. 8vo. edit.

country situated to the south of the former, and justly inferred to have been the Golden Chersonese of the ancients.

Extent and Boundaries.] It is difficult to ascertain with precision the boundaries of the Birman empire. Mr. Symes informs us that "it appears to include the space between the 9th and 26th degree of north latitude, and between the 92d and 107th degrees of longitude east of Greenwich; about 1050 geographical miles in length and 600 in breadth: these are the ascertainable limits, taken from the Birman accounts. It should however be remarked that the breadth often varies, and is in many places very inconsiderable on what is called the Eastern Peninsula."* According to Hassel, this empire, embracing Ava, Pegu, and Arrakan, contains 223,750 square miles.

The geography of what is called India beyond the Ganges, a vague name for the wide and various regions between Hindostan and China, is still defective. To the north the Birman empire is divided by mountains from Asam, a country little visited or known; and farther to the east it borders on Tibet and China. On the west a range of mountains and the little river Naaf divide the Birman possessions from the British dominions in Bengal; and the limit is continued by the sea. But the southern and eastern boundaries still remain obscure. Amidst this uncertainty it must suffice to observe that the Birman empire constitutes the fifth grand native power in Asia since Hindostan and Persia have been divided, and may probably extend its authority over Laos and Cambodia, while it remains divided by deserts and ranges of lofty mountains from the united kingdoms of Cochin-China and Tunquin.

Original Population.] The original population of this region has been little illustrated. The alphabet, literature, and religion, are derived from those of the Hindoos; but the language, the grand criterion of national origins, has not been regularly collated with those of the adjacent countries.†

Progressive Geography.] Although this country appears to have been known to the ancients, constituting the utmost boundary of their knowledge in this quarter of the globe,‡ yet the first precise ideas concerning this part of the globe were derived from the discoveries of the Portuguese, but the geography remains so imperfect that even D'Anville has erred in the delineation; and Mr. Symes's work leaves room for many illustrations and improvements when future travellers shall investigate with care the countries beyond the Ganges.§

History.] The history of the Birman empire is detailed at some length in the introductory part of the recent publication; and as it displays the origin of a new and great Asiatic power, it may

* Symes's Account of the Embassy to Ava, ii. 411.

† See vol. vi. of the Asiatic Researches.

‡ Geograph. des Grecs. Analys. 139.

§ The French intercourse with Siam, towards the end of the seventeenth century occasioned many descriptions of that kingdom; but the accounts of Ava and Pegu are rare. There is one of Tunquin and Laos, translated from the Italian of Marini, Paris, 1661, &c.

be interesting to present an abstract. From the Portuguese accounts it appears that the Birmans, a brave and warlike race, formerly subject to the king of Pegu, became afterwards masters of Ava, and caused a revolution in the former country about the middle of the sixteenth century, when they took Martaban. The Portuguese continued to influence these countries, till they were expelled by the Dutch, who obtained settlements in various parts of the Birman territory; while the English had factories at Sirian, and even at Ava.

The Birmans continued to exercise their supremacy over Pegu till about the year 1740, when a civil war arose, during which the British factory at Sirian was destroyed in 1744. By some European aids the Peguese in 1750 and 1751, gained several victories over the Birmans; and in 1752 Ava was besieged and taken; the last of a long line of Birman kings being reduced to captivity; but two of his sons escaped to Siam.

When Binga Della, king of Pegu, had completed the conquest of Ava, he returned to his own country, leaving his brother Apporaza to govern the late capital of the Birman king. All wore the aspect of tranquil submission, when there suddenly arose one of those men who are destined, by means almost invisible, to break the strongest rod of power, and to change the fate of empires. Alompra, a Birman of low extraction, was the chief of a small village, and was continued in this petty office by the victors. With one hundred devoted followers he attacked a band of fifty Peguese, whom he put to the sword; and afterwards defeated a small force sent against him; and about the autumn of 1753, took possession of Ava, while the Peguese government seems to have been lost by mere infatuation. After repeated defeats Binga Della himself advanced against Alompra, and the war was conducted by fleets on the great river Irrawady, as well as by land, that of the Peguese being utterly defeated in close combat by that of the Birmans. Alompra proceeding in his conquests founded the town now well known by the name of Rangoon, which signifies "victory atchieved;" and soon after chastised the people of Cassay, who had revolted from the Birman authority. In 1756 he blockaded Sirian, which yielded to his arms; and after having deprived the capital of any foreign aid by water, he advanced against the city of Pegu, situated on an extensive plain, and then surrounded with no mean fortifications, while the stupendous pagoda of Shomadoo served as a citadel. This capital was invested in January 1757, and in about three months became a prey to the Birmans. Alompra then proceeded to subdue the countries to the eastward, as far as the three pagodas, the ancient boundary between Pegu and Siam. Tavoy has been since added to the Birman possessions in this quarter.

Alompra next determined to chastise the Siamese, for the encouragement they had given to his rebellious subjects, and ordered a fleet to sail to Merghi, a sea-port belonging to the Siamese, which was easily taken, and was followed by the conquest of Tan-aserim, a large and populous city.

The victor next advanced against the capital of Siam ; but two days after the siege had commenced, Alompra was seized with a deadly disease, which saved the Siamese from destruction. He died within two days march of Martaban, about the 15th of May, 1760, regretted by his people, who at once venerated him as their deliverer, and as a great and victorious monarch. This founder of the Birman empire had not completed his fiftieth year ; his person strong and well proportioned, exceeded the middle size ; and though his features were coarse, his complexion dark, and his countenance saturnine, there was a dignity in his deportment that became his high station.

He was succeeded by his son Namdogee, who suppressed several insurrections, and died in 1764, leaving an infant son, Momien, whose uncle Shembuen, second son of the great Alompra, assumed the regency and afterwards the diadem.

Shembuan, to divert the national attention, as usual with usurpers, declared war against Siam ; and in 1769 two armies entered that country from the N. and S., and, being united, defeated the Siamese about seven days journey from their capital. The Siamese king privately withdrew after a blockade of two months, and the city capitulated ; a Siamese governor being appointed who swore allegiance to the Birman sovereignty, and engaged to pay an annual tribute.

The Chinese, apprehensive of the progress of these conquests, advanced an army from the province of Yunan, but were completely defeated by the Birmans. Policy spared the captives, who were invited to marry Birman wives, the Hindoo prejudices being here unknown. Shembuan rebuilt Ava Haung, or ancient Ava, the metropolis of the empire, which had fallen to ruin during the late commotions. The Siamese though vanquished remained unsubdued ; and there is an inveterate enmity betwixt the nations, which will prevent either servitude or alliance.* A Siamese prince assumed the monarchy, and in 1771, defeated the Birmans. Shembuan afterwards turned his arms to the west, and forced the raja of Cachar to pay homage to his power. He died at Ava, in 1776, and was succeeded by his son Chenguza, whose tyrannical conduct occasioned a conspiracy, at the head of which was Shembuan Minderagee, the present monarch, younger brother of the deceased Shembuan. Chenguza was slain in 1782.

The southern conquests of the Birmans had already extended as far as Merghi, and the northern provinces formerly belonging to Siam, had been reduced to subjection and tribute. Minderagee determined to pass the mountains of Anoupec, and subdue Arracan, the raja or prince being of a supine character, and his subjects unwarlike, though they had never been reduced to pay homage to any foreign power. This conquest was commenced in 1783, and was speedily effected.

After this conquest the Birman arms were again turned against Siam, and in 1785 a fleet was sent to subdue the isle of Junkseylon,

* Symes, i. 171.

which carries on a considerable trade in ivory and tin, and is the only remaining mart of Siamese trade on this coast. Meeting with a repulse, the Birman monarch left his capital at the head of 30,000 men, with a train of 20 field pieces; but was defeated by the king of Siam, who in his turn failed in an invasion of the vice-royalty of Martaban, which comprehends Tavoy, Merghi, and all the Birman possessions to the south. In 1793 a treaty was ratified between the Birmans and Siamese, by which the latter ceded the western maritime towns as far S. as Merghi inclusive. But with this exception, and that of some northern provinces, the Siamese monarchy retains a considerable portion of its ancient fame. Hence it appears that the Birman empire can scarcely be computed to extend beyond the 102 degree of longitude, and that only in the part to the north of Siam.

Religion.] The Birmans follow the worship of Hindostan, not as votaries of Brahma, but as disciples of Boodh, which latter is admitted by Hindoos of all descriptions to be the ninth Avatar, or descent of the deity in his capacity of preserver.* The Birmans believe in the transmigration of souls; after which the radically bad will be condemned to lasting punishment, while the good shall enjoy eternal happiness in the mount Meru. They esteem mercy to be the chief attribute of the divinity. Of the religious buildings appropriated to the Birman worship, are temples near Rangoon, at Pegu, and Syriam.

Laws.] The laws of the Birmans are inseparable from their religion. The sacred verses or forgeries of Menu are illustrated by numerous commentaries of the Munis, or old philosophers, and constitute the Dherma Sastre, or body of laws. Both the religion and laws proceeded originally from Ceylon, and passed through Aracan to Miama. "The Birman system of jurisprudence is replete with sound morality, and is distinguished above any other Hindoo commentary for perspicuity and good sense; it provides specifically for almost every species of crime that can be committed, and adds a copious chapter of precedents and decisions, to guide the inexperienced in cases where there is doubt and difficulty. Trial by ordeal and imprecation are the only absurd passages in the book; but on the subject of women it is to an European offensively indecent; like the immortal Menu, it tells the prince and the magistrate their duty, in language austere, manly, and energetic."

Government.] Though the form of government be despotic, yet the king consults a council of ancient nobles. There are no hereditary dignities nor employments; but all honours and offices, on the demise of the possessor, revert to the crown. The *tsaloe*, or chain, is the badge of nobility, the number of strings or divisions denoting the rank of the person, being three, six, nine, or twelve, while the king alone wears twenty-four. Rank is also denoted by the form and material of various articles in common use.

Population.] The number of cities, towns and villages, in this

empire, according to Col. Symes, is 8000. He states its population at 17,000,000, confessedly however the result of a very vague estimate. Of these 14,000,000 are in Ava and Pegu, and 3,000,000 in Arracan.*

Army and Navy.] Every man in the empire is liable to military service, but the regular army is very inconsiderable. During war the viceroys raise one recruit from every two, three, or four houses, which otherwise pay a fine of about £40.† sterling. The family of the soldier is detained as hostages; and in case of cowardice or desertion suffer death, a truly tyrannic mode of securing allegiance. The infantry are not regularly clothed, but are armed with muskets and sabres; while the cavalry carry spears, about seven or eight feet in length. The royal magazines are said to contain about 20,000 indifferent firelocks. But the war boats form the chief military establishment, consisting of about 500, formed out of the solid trunk of the teak tree, the length being from 80 to 100 feet, but the breadth seldom exceeding eight. They carry from 50 to 60 rowers, the prow being solid, with a flat surface, on which a piece of ordnance is mounted. Each rower is provided with a sword and lance, and there are 30 soldiers armed with muskets. The attack is impetuous, and chiefly conducted by grappling; but the vessels being low in the water, the greatest danger is that of being run down by a larger boat striking the broad side. Their naval actions thus recal to remembrance those of classical antiquity.

Revenues.] The revenue arises from one tenth of all produce, and of foreign goods imported; but the amount is uncertain. Yet as grants are commonly made in land or offices, and no money leaves the royal treasury except in cases of great emergency, it is supposed that the monarch possesses immense treasures.

Political Importance and Relations.] The political importance and relations of the Birman empire may considerably influence the commerce of the east, and may be considered as a barrier against the ambition of the Chinese, who might perhaps be induced to extend their possessions in this quarter, and might, in co-operation with the native princes, endanger the British possessions in Hindostan. Such is, however, the superiority of European arms, that this event is little to be apprehended. But if the Birmans, as is not improbable, were to extend their authority over the whole of that part called India beyond the Ganges, they might, as being a most brave and determined nation, prove dangerous neighbors to the English possessions in Bengal, especially if so far advanced in policy as to co-operate with the western princes of Hindostan. The temporary disgusts therefore between the British and Chinese ought not to induce the former to forget the greater danger from the Birmans, whose empire it cannot be for the British interest to enlarge, though policy will prevent their offering any open obstruction.

Manners and Customs.] The general disposition of the Birmans is strikingly contrasted with that of the Hindoos, from whom they

* Hassel.

† Symes, ii. 352.

are separated only by a narrow range of mountains, in many places admitting of an easy intercourse.* Notwithstanding the small extent of this barrier, the physical difference between the nations could scarcely be greater, had they been situated at the opposite extremities of the globe. The Birmans are a lively, inquisitive race, active, irascible, and impatient ; the unworthy passion of jealousy, which prompts most nations of the east to immure their women within the walls of an haram, and surround them with guards, seems scarcely to have any influence over the minds of this extraordinary and more liberal people. Birman wives and daughters are not concealed from the sight of men, and are suffered to have as free intercourse with each other, as the rules of European society admit ; but in other respects women have just reason to complain of their treatment, they are considered as not belonging to the same scale of the nation as men, and even the law stamps a degrading distinction between the sexes ; the evidence of a woman being not received as of equal weight with that of a man.

The women though free are generally too much occupied in the labors of the loom to admit of infidelity, the offspring of idleness. In war the men display the ferocity of savages, while in peace they can boast a considerable degree of gentleness and civilization. The Birman year comprises twelve months of 29 or 30 days alternately, a month being interposed every third year. The subdivision of the month is peculiar, as they number the days not only from the new moon, but from the full, which last is called the decreasing moon. They are fond of poetry and music, and among their instruments is the heem, resembling the ancient pipe of Pan, formed of several reeds neatly joined together, and sounded by a common mouth-piece, so as to produce a plaintive melody.

Language and Literature.] The alphabet represents 33 simple sounds, and is written from left to right like the European. The Birman books are more neatly executed than those of the Hindoos, and in every *kioul* or monastery, there is a library or repository of books. Colonel Symes was surprised at the number contained in the royal library, in which the large chests amounted to about 100.† The books were regularly classed, and the contents of each chest were written in gold letters on the lid.

The study of the laws and national religion must of course constitute a considerable branch of education among the great ; that of the poor seems to be utterly neglected.

Cities.] Ava, the ancient capital, has been permitted to sink into ruin since the recent foundation of Ummerapoora, on the eastern side of a great river which flows into the Irrawady. The new capital, with its spires, turrets, and lofty piasath, or obelisk, denoting the royal presence, seems to rise, like Venice, from the waters, being placed between a lake on the S. E. and the large river, with numerous isles, on the N. W. The lake is called Tounzemahn, from a village on the opposite side, ornamented

* Symes, ii. 583.

† Ib. iii. 93.

with tall groves of mango, palmyra, and cocoa trees. The number and singularity of the boats that were moored in the lake, and the surrounding amphitheatre of lofty hills, conspired to render the scene grand and interesting. The fort is an exact square, with public granaries and store rooms ; and there is a gilded temple at each corner, nearly 100 feet in height, but far inferior to others in the vicinity of the capital. In the centre of this fort stands the royal palace, with a wide court in front, beyond which is the Lotoo, or hall of council, supported by 77 pillars, disposed in eleven rows. The extent and population of this city have not been accurately stated, but are probably inconsiderable.

Ava, formerly the capital, is also styled Aungwa, but is in a state of ruin. "The walls are now mouldering into decay, ivy clings to the sides, and bushes, suffered to grow at the bottom, undermine the foundation, and have already caused large chasms in the different faces of the fort. The materials of the houses, consisting chiefly of wood, had, on the first order for removing, been transported into the new city of Ummerapoora : but the ground, unless where it is covered with bushes or rank grass, still retains traces of former buildings and streets. The lines of the royal palace, of the Lotoo, or grand council hall, the apartments of the women, and the spot on which the piasath, or imperial spire had stood, were pointed out to us by our guide. Clumps of bamboos, a few plantain trees, and tall thorns, occupy the greater part of the area of this lately flourishing capital. We observed two dwelling houses of brick and mortar, the roofs of which had fallen in ; these our guides said had belonged to Colars, or foreigners. On entering one we found it inhabited only by bats, which flew in our faces, whilst our sense of smelling was offended by their filth, and by the noisome mildew that hung upon the walls. Numerous temples, on which the Birmans never lay sacrilegious hands, were dilapidating by time. It is impossible to draw a more striking picture of desolation and ruin."*

Pegu, formerly the capital of a kingdom, is also in ruins, having been razed by Alompra, in 1757, the praws or temples being spared ; and of these the vast pyramid of Shomadoo has alone been reverenced, and kept in repair. The present Birman monarch has endeavored to conciliate the Taliens, or native Peguese, by permitting them to rebuild their ancient city, within the site of which a new town has accordingly been reared. The city occupies about half its former extent, and is the residence of the Maywoon, or governor of Pegu. It is decorated with that extraordinary edifice the Shomadoo, seated on a double terrace, one side of the lower being 1391 feet, of the upper 684. The building is composed of brick and mortar, octagonal at the base, and spiral at the top, without any cavity or aperture. At the summit is a Tec, or sacred umbrella, of open iron work, gilt, 56 feet in circumference ; the height of the whole being 361 feet, and above the inner terrace, 331 feet. Tradition bears that it was founded

* Symes, ii. 270.

about 500 years before Christ. A more complete idea of this very singular edifice may be obtained from the print published by colonel Symes, than any verbal description can convey.

One of the chief ports of the Birman empire is Rangoon, which, though like the capital, of recent foundation, is supposed to contain 30,000 souls. Towards the mouth of the river Pegu, stands Sirian, formerly one of the chief ports of that kingdom, and of considerable commerce when in possession of the Portuguese. It was particularly celebrated for the export of rubies, and other precious stones, which seem, however, to be chiefly found in the northern mountains.

Martaban was another sea port of considerable eminence, till the harbor was impeded by order of the Birman emperor. Of Tavoy and Merghi, little is known; but Tanaserim maintains the dignity of a city.

The grand river of Irrawady is bordered with numerous towns and villages. Persain, or Bassien, stands on its western branch. At a considerable distance to the north is Prome, celebrated as the scene of many long sieges and bloody conflicts. The number of inhabitants exceeds that of Rangoon. Pagahm is also a considerable place. Nor must Aracan, a recent acquisition, be forgotten, which is divided by several canals, derived from a river of the same name.

Towards the Chinese frontier are Quangtong, corresponding in name with the distant province, called Canton, by Europeans; Bamoo, and in the county of Cassay, Munnipora. Monchaboo is a considerable town to the north of the capital.

Edifices.] The most remarkable edifice is the Shomadoo, before described. The Kioums are often of singularly rich and fantastic architecture, as may be observed in the delineation given by colonel Symes; who has also published a view of the grand hall of audience, perhaps as splendid an edifice as can well be executed in wood. His reception at the "golden feet," such is the term used for the imperial presence, was also remarkably grand, the pomp in some degree corresponding with that of the ancient Byzantine emperors.

Inland Navigation.] Nature has so amply provided the means of inland navigation, by the numerous mouths and streams of the grand river Irrawady, that additional industry seems superfluous.

Manufactures.] The Birmans excel in gilding, and several other ornamental manufactures. The edifices and barges are constructed with singular oriental taste and elegance; and at Chagain is a manufacture of marble divinities, the material being remarkably fine, and almost transparent.

Commerce.] A considerable trade is carried on between the capital and Yunan, the nearest province of China, consisting chiefly in cotton, with amber, ivory, precious stones, and betel nut; the returns being raw and wrought silks, velvets, gold leaf, preserves, paper, and some utensils of hard ware. Several thousand boats are annually employed in transporting rice from the lower provinces, to supply Ummerapoora, and the northern districts.

Salt and gnapee, a kind of fish sauce, used with rice, are also articles of internal commerce. European broad cloth and hardware, coarse Bengal muslins, China ware, and glass, are imported by foreigners. The Birmans, like the Chinese, have no coin; but silver in bullion, and lead, are current.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, RIVERS, LAKES, MOUNTAINS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, ISLES.

Climate and Seasons.] THE vigorous health of the natives attests the salubrity of the climate, the seasons being regular, and the extremes of heat and cold little known.

Face of the Country.] The face of the country affords almost every variety, from the swampy Delta of the Irrawady to pleasant hills and dales, and considerable ranges of mountains. "The soil of the southern provinces of the Birman empire is remarkably fertile, and produces as luxuriant crops of rice as are to be found in the finest parts of Bengal. Farther northward the country becomes irregular and mountainous; but the plains and vallies, particularly near the river, are exceedingly fruitful; they yield good wheat, and the various kinds of small grain which grow in Hindostan; as likewise legumes, and most of the esculent vegetables of India. Sugar canes, tobacco of a superior quality, indigo, cotton, and the different tropical fruits in perfection, are all indigenous products of this favorite land."* Agriculture seems to be pursued with considerable avidity, but the mode has not been particularly illustrated.

Rivers.] The chief river of the Birman empire is the Irrawady, which, probably passes by Moguang to Bamoo, and thence by Ummerapoora, and Prome, towards the sea, which it joins by many mouths, after a comparative course of near 1200 British miles. The Keen Duem seems to rise in the mountains towards Asam, being of much inferior size where it joins the Irrawady.

The river Sitang is the next on the east, after passing the small river of Pegu, but seems to be a kind of remote branch of the Irrawady.

The Thaluan enters the sea near Martaban, the length of its course exceeds that of the Irrawady, though not being fed by such numerous streams, it cannot equal it in size. The river of Siam; or Maygue, also pervades a part of the Birman territory. The geography of all these rivers remains imperfect.

Mountains.] It is probable that the highest range of mountains is on the frontiers of Tibet. The other ranges are delineated as

* Symes, ii. 372.

passing N. and S., but the names are not indicated, except those of Anoupec, between Ava and Arracan, and a small range running E. and W., which supplies the sources of the river of Pegu.

Forests.] The forests are large and numerous, many parts remaining in a state of nature. They supply almost every description of timber that is known in Hindostan; and, about four days journey to the N. of the capital, firs grow in abundance. But the lord of the Birman forest is the teak tree, superior to the European oak, which is there unknown: the teak flourishes in many parts of the empire, to the N. of the capital as well as to the S.

Botany.] All the countries that compose the rich and extensive territory of India beyond the Ganges, including the Birman empire, and the dominions of Pegu, Siam, Cambodia, Cochinchina, and Malacca, bear such a similarity to each other in their vegetable productions as far as they have been investigated, as renders it impossible to give a general and separate view of their respective floras without continual repetitions. Certain districts also in farther India have been examined with considerable attention, while others similarly situated have remained almost wholly overlooked: it is only therefore from analogy (a highly probable one indeed) that we can conjecture the most characteristic species of their indigenous plants. The mountains of the interior, and in general the whole northern frontier, are still totally unexplored, and the deep forests infested with tigers, must ever continue, even in the more accessible parts, to oppose no trifling obstacles to the spirit of scientific adventure.

It is in those parts of the torrid zone that abound with water, and where, from the influence of the monsoons, the country is extensively flooded every year, that vegetation assumes a vigor and sublimity wholly inconceivable by the native of more temperate climates: everlasting verdure, grace, and majesty of form, height and amplitude of growth, are the distinguishing attributes of their trees, compared with which the monarchs of our forests sink into vegetables of an inferior order: the same exuberance of nature is conspicuous in their shrubs and herbaceous plants, in their blossoms and their fruits, whose vivid brilliancy of color, singularity of shape, aromatic fragrance, and exalted flavor, reduce to relative insignificance the puny produce of European summers.

Here rises in proud magnificence the white sandal tree, whose fragrant wood is in high request through the whole east for the grateful odour of its smoke. The teak tree (*tectona theca*) is at least equal even to British oak as a durable material for shipbuilding: the true jet black ebony wood is the produce of one of the indigenous trees of Cochinchina. The sycamore fig, the Indian fig, and the banyan tree, itself a grove, by the breadth of their leaves and the luxuriance of their foliage, afford a most delicious shelter, impenetrable even by the meridian ardor of an Indian sun.

Of the plants that are used in medicine or the arts some of the most important are natives of farther India: the nature of this work does not admit of specifying the whole, but those of most

consequence are the following. The ginger and cardamon, two pleasant aromatics, are found wild on the river sides, but are also cultivated in great abundance ; the turmeric, whose principal use in Europe is as a dying drug, is largely used by the natives of the coast to tinge and flavor their rice and other food : the leaves of the betel pepper, with the fruit of the black and long pepper, are the most favorite of their native spices, to which may also be added three or four kinds of capsicum. The cinnamon laurel grows in abundance on each side of the Malayan peninsula, and sometimes, as it is said, accompanied by the nutmeg. The sugar cane, the bamboo, and the spikenard, the three most celebrated plants of the grass tribe, are found throughout the whole country ; the two former in rich swamps, and the latter on dry hills. The sweet potatoe, mad apple and loveapple, gourds, melons, water melons, and a profusion of other esculent plants, enrich this favored country ; all these however require cultivation : but the plantain, the cocoa nut, the sago palm, furnished by the free unstinted bounty of nature, contribute most plentifully to satisfy the wants of the inhabitants. Of native fruits they possess a vast variety and an inexhaustible abundance. The vine grows wild in the forests, but from excessive heat and want of cultivation its fruit is far inferior to that of the south of Europe : to compensate however for this deficiency, they have the luscious mango, the pine apple, the sapindus edulis (the li-tschi of the Chinese,) the mangosteen plum, the custard apple, the papaw fig, the orange, the lemon and lime, and a multitude of other exquisite fruits, whose very names are scarcely known in Europe.

Zoology.] The animals in general correspond with those of Hindostan. Elephants principally abound in Pegu. The horses are small, but spirited. A kind of wild fowl called the henza, and by the Hindoos the braminy goose, has been adopted as the symbol of the empire, like the Roman eagle.

Mineralogy.] The mineralogy of this region, the Golden Chersonese of the ancients, is rich, and some products rather singular. While Malacca, which has hitherto been supposed the Golden Chersonese, scarcely produces any mineral, except tin, and is in truth a poor country, celebrated chiefly as an emporium of Portuguese trade with China ; the rivers of Pegu, on the contrary, still continue to devolve particles of gold ; and their sands must in ancient times have been yet more prolific of that precious metal. Nor is it improbable that the practice of gilding the roofs and spires of temples and palaces is very ancient, as we are told that the Shomadoo was built about 500 years before the Christian era ; in which case the splendid appearance might naturally give rise to the classical appellation of the country. In many regions gold is found intermingled with silver ; and six days journey from Bamoo (probably towards the north) there are mines of gold and silver at Badouem, near the frontiers of China. By a singular conjunction, there are, according to the same authority, mines of gold, silver, rubies, and sapphires, at present open on a mountain called Woeboloo-taun, near the river Keen Duem.

There is also abundance of inferior minerals, as tin, iron, lead, antimony, arsenic, and sulphur; and amber, a rare and singular product, is not only dug up in large quantities near the river Irrawady, but is uncommonly pure and pellucid.

The most singular product of Pegu is the ruby, a stone next to the diamond in value, and which is found in a mountain between Sirian and Pegu, this substance being almost as peculiar as the diamond is to Hindostan. Rubies and sapphires are also found in the north western part of the empire; but the most valuable mines are in the vicinity of the capital, or rather about 30 miles to the north.

MALAYA, OR MALACCA.

PROGRESSIVE GEOGRAPHY, NAME AND EXTENT, LANGUAGE, PRODUCTS, CITY OF MALACCA, GENERAL REMARKS ON THE MA-LAYS, ISLES OF ANDAMAN AND NICOBAR.

THE peninsula appended to the Birman territories on the south is styled Malaya or Malacca.

Progressive Geography.] This Chersonese was certainly unknown to the ancients, and seems to have escaped the knowledge of Marco Polo, if this be not his Maletur, where he says there was abundance of spices, and the natives had a proper and peculiar speech.

However this be, the Portuguese are regarded as the first discoverers of Malacca in 1509, to which they were led by the vain idea of finding the golden Chersonese of the ancients. In 1511 the Portuguese conquered the peninsula.

Name.] The name is derived from the Malaya, who are mostly Mahometans, and in some degree civilized; but the inland parts seem to be possessed by a more rude native race, little known amidst the imperfection of materials concerning this country. The northern limits are not strictly defined; but Malacca is about 8°, or near 560 miles in length, by about 150 miles of medial breadth, a territory sufficiently ample for a powerful monarchy, had its native productions corresponded with its extent.

Language.] The Malayan language has been called the Italian of the east, from the melody of frequent vowels and liquids.

The Arabic character is made use of; and an influx of words of that language has followed the adoption of the Mahometan religion. They write on paper, using ink of their own composition, and pens made of the twigs of a tree. The purest Malay is still supposed to be spoken in the peninsula, and has no inflexion of nouns or verbs.

Divisions.] Malacca is represented as divided into the king-

dom of Patani in the north, and that of Yohor or Jor occupying the southern extremity of the peninsula, the chief towns being Batu-saber the capital, Linga, Bintam, and Carimon.

Products.] The inland parts of the Malayan peninsula seems to remain full of extensive aboriginal forests ; nor do the ancient or modern maps indicate any towns or villages in these parts. The indolence of the inhabitants has prevented the country from being explored ; but it produces pepper, and other spices, with some precious gums and woods. The wild elephants supply abundance of ivory ; but the tin, the only mineral mentioned, may perhaps be the produce of Banka.

The city of Malacca, which seems to have been founded by Mahometans in the thirteenth century, was held by the Portuguese till 1641, when it was seized by the Dutch. It was considered as situated in the southern kingdom of Yohor ; and in the last century was supposed to contain 12,000 inhabitants, of which however only 3000 dwelt within the walls. Not above 300 were native Portuguese, the others being a mixed race of Mahometan Malays, accounted among the chief merchants of the east. The Portuguese settlement did not extend above five leagues around ; yet became highly important from its advantageous position for Indian and Chinese commerce.*

The disgraceful jealousy of the Dutch concerning their oriental possessions renders the recent accounts of this city imperfect.

In general the Malays are a well made people, though rather below the middle stature, their limbs well shaped, but small, and particularly slender, at the wrists and ankles. Their complexion is tawney, their eyes large, their noses seem rather flattened by art than nature ; and their hair is very long, black, and shining.

Besides the tiger and elephant, Malacca produces the civet cat described by Sonnerat, who also mentions that wild men are found in this peninsula, perhaps the noted Orang Outang.

They are restless, fond of navigation, war, plunder, emigrations, colonies, desperate enterprizes, adventures, and gallantry. They talk incessantly of their honor and their bravery, whilst they are universally considered by those with whom they have intercourse, as the most treacherous, ferocious people on the globe ; and yet, they speak the softest language of Asia.

This ferocity is so well known to the European companies, who have settlements in the Indies, that they have universally agreed in prohibiting the captains of their ships, who may put into the Malay islands, from taking on board any seamen of that nation, except in the greatest distress, and then on no account to exceed two or three.

It is nothing uncommon for a handful of these savages suddenly to embark, attack a vessel by surprize, poniard in hand, massacre the people, and make themselves masters of her. Malay barks, with 25 or 30 men, have been known to board European ships of 30 or 40 guns, in order to take possession of them, and murder

* Mandelslo, i. Col. 337.

with their poniards great part of the crew. The Malay history is full of such enterprizes, which mark the desperate ferocity of these barbarians.

Opposite to the coast of Malacca, though at a considerable distance, are the islands of Andaman and of Nicobar. The great Andaman is about 140 miles in length, but not more than 20 in the greatest breadth, indented by deep bays affording excellent harbors, and intersected by vast inlets and creeks, one of which, navigable for small vessels, passes quite through the isle.* The soil is chiefly black mould, the cliffs of a white arenaceous stone. The extensive forests afford some precious trees, as ebony, and the Nicobar bread fruit. The only quadrupeds seem to be wild hogs, monkeys, and rats. The sea supplies numerous fish, and excellent oysters. The people of the Andamans are as little civilized as any in the world, and are probably cannibals. They have woolly heads, and perfectly resemble negroes. Their character is truly brutal, insidious, and ferocious, and their canoes of the rudest kind. On Barren isle, about 15 leagues east of the Andamans, is a violent volcano, which emits showers of red hot stones; and the whole island has a singular and volcanic appearance. A British settlement has been recently formed on the Greater Andaman, and some convicts sent thither from Bengal. The natives, about 2000, have already profited by the example of English industry.

The Nicobars are three; the largest being about five leagues in circumference.† They produce cocoa and areca trees, with yams and sweet potatoes; and the eatable bird's nests, so highly esteemed in China, abound here as well as in the Andamans. The people are of a copper colour, with small oblique eyes and other Tartar features. In their dress a small stripe of cloth hangs down behind; and hence the ignorant tales of seamen, which led even Linnæus to infer, that some kind of men had tails. The only quadrupeds are swine and dogs. The traffic is in cocoa nuts, of which one hundred are given for a yard of blue cloth.

SIAM.

CHAPTER I.

HISTORICAL GEOGRAPHY.

NAME, EXTENT, BOUNDARIES, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, RELIGION, GOVERNMENT, LAWS, POPULATION, ARMY, NAVY, REVENUES, POLITICAL IMPORTANCE, MANNERS, LANGUAGE, LITERATURE, CITIES, EDIFICES, MANUFACTURES, COMMERCE.

TILL the recent extension of the Birman empire, the rich and flourishing monarchy of Siam was to be regarded as the

* As. Res. iv. 385.

† Ibid. iii. 149.

chief state of exterior India. This kingdom, with Malacca, contains, according to Hassel, about 143,000 square miles.

Name.] The name of this celebrated country is of uncertain origin, and in appearance first delivered by the Portuguese, in whose orthography Siam and Siaō are the same, so that Sian, or Siang, might be preferable to Siam;* and the Portuguese writers in Latin call the natives *Siones*. The Siamese style themselves *Tai*, or freemen; and their country *Menang Tai*, or the kingdom of freemen. It is probable that the Portuguese derived the name Sian from intercourse with the Peguese.†

Extent and Boundaries.] The extent of the Siamese dominions has been recently restricted by the encroachments of the Birmans, nor can some of the limits be accurately defined. On the west of the Malaian peninsula a few possessions may remain, to the south of Tanaserim; and on the eastern side of that Chersonese Ligor may mark the boundary. On the west a chain of mountains seems to divide Siam, as formerly, from Pegu,—but the northern province of Yunshan would appear to be in the hands of the Birmans, who here seem to extend to the river Maykang. To the south and east the ancient boundaries are fixed; the ocean, and a chain of mountains, dividing Siam from Laos and Cambodia. Thus the ancient idea may be retained, that this kingdom is a large vale between two ridges of mountains.

The length of the kingdom may be about ten degrees, or near 700 British miles: but of this about one half is not above 70 miles in medial breadth.

Original Population.] The original population of Siam, and other regions of exterior India, can only be traced by affinity of language: and the topic has been little illustrated.

Progressive Geography.] The progressive geography of Siam ascends to classical antiquity, if the people be, as is reasonably inferred, the Sinæ of Ptolemy. In the reign of the emperor Justinian, Cosmas, called Indicopleustes, mentions the silk of the Sinæ, as imported into Taprobana; which he also calls *Siulediva*, coinciding with *Selendib*, the oriental name of Ceylon: and when he adds that this isle was at an equal distance from the Persian gulf, and the region of the Sinæ, he affords an additional proof that the latter was Siam. This country is not indeed at present remarkable for the production of silk, the staple article of the ancient Sinæ; but it appears that the silk of the early classics was the growth of a tree, a kind of silky cotton, still abundant in Siam; and perhaps, as Malacca afterwards became famous for products not its own, so Siam, in a similar centrical position between China and Hindostan, might, in ancient times, be the mart of this and other more oriental articles.

Some faint notices concerning Siam may probably occur in the oriental geographers of the middle ages; but such inquiries are more proper for an antiquarian dissertation. Suffice it to observe

* Loubere, i. 16. edit. Amst. 1714.

† Shan is the oriental term, as appears from several papers in the Asiatic Researches.

that, till the Portuguese discoveries, Siam may be said to have remained unknown to Europeans. In the middle of the seventeenth century Mandelslo* has compiled a tolerable account of this country; but the French descriptions present more precision of knowledge, as well as more extent of information. By the latter was reformed a singular error in the geography, which deduced the great rivers of Ava, Pegu, and Siam from a large inland lake, called Chiamai, in lat. 30, while Tibet is placed in lat. 40. But on comparing the maps of Asia in the beginning of last century, the reader will be sensible of the great progress of geography in recent times.

Historical Epochs.] The Siamese history is imperfect, and abounds with fables. By Loubere's account their first king began to reign in the year 1300 of their epoch, or about 756 years after the Christian era. Wars with Pegu, and occasional usurpations of the throne, constitute the hinges of Siamese history since the Portuguese discovery. In 1568 the Peguese king declared war on account of two white elephants, which the Siamese refused to surrender, and after prodigious slaughter on both sides, Siam became tributary to Pegu. But about 1620, Raja Hapi delivered his crown from this servitude.† In 1680, Phalcon, a Greek adventurer, being highly favored by the king of Siam, opened an intercourse with France, in the view of supporting his ambitious designs; but they were punished by his decapitation in 1689, and the French connexion ceased in consequence. The latter events of Siamese history may partly be traced in that of the Birman empire. In 1775, Siam regained its freedom, having lost much of its former grandeur.‡

Religion.] The religion of the Siamese, like that of the Birmans, resembles that of the Hindoos; and the transmigration of souls forms an essential part of their doctrine; but they imitate the Chinese in their festival of the dead, and in some other rites of that singular nation.

Government.] The government of Siam is despotic; and the sovereign, as among the Birmans, revered with honors almost divine. The succession to the crown is hereditary in the male line.

Laws.] The laws are represented by all writers on this country as extremely severe, death or mutilation being punishments even of unimportant offences.

Population.] Concerning the population of Siam there are no adequate documents. If the Birman empire contain, as is asserted, more than fourteen millions, it might perhaps be resonable to conclude that the Siamese dominions may be peopled by about eight millions. Yet Loubere assures us, that from actual enumeration, there were only found of men, women, and children, 1,900,000.§ This last estimate corresponds with that of Bruns. So uncertain are the computations in oriental countries!

Army.] Loubere says that, in his time, there was no army except a few royal guards; but Mandelslo estimated the army, which

* Col. 304—331. † Mandelslo, 322. ‡ Hassel. § Mandelslo, i. 30.

may be occasionally raised, at 60,000, with not less than 3000 or 4000 elephants. The manner of raising this army resembles that already described, as practised in the Birman empire.

Navy.] The navy is composed of a number of vessels of various sizes, some of which are richly decorated. Hence, as in the Birman history, naval engagements are not uncommon; and the large rivers of exterior India are often reddened with human gore. Both the Birman and Siamese vessels frequently display a singular, fantastic elegance.

Revenues.] The revenues of this sovereignty are of uncertain computation. There is a royal treasury, as in most other eastern states, but voyagers have not attempted to define its probable amount.

Political Importance and Relations.] Siam appeared of considerable political importance to the French in the reign of Louis the XIV., who aspired to form lasting settlements, and render it a mart of Indian commerce, and a source of great opulence to themselves. Were the Birmans to become dangerous to the British possessions in Bengal, a firm alliance with Siam might be highly serviceable to that nation. In a merely commercial point of view, as it may be difficult to preserve the friendship both of the Birmans and the Siamese, it is matter of calculation from which state superior advantages may be derived.

Manners and Customs.] There is a considerable similitude in the manners and customs of all the states between the vast countries of China and Hindostan; with shades of difference, as they approximate to either of these *foci* of civilization. Siam, though centrical, has embraced a branch of Hindoo faith, and the manners are rather Hindostanic than Chinese.

The women are under few restraints, and are married at an early age. The espousals are concluded by female mediation; and on the third visit the parties are considered as wedded, after the exchange of a few presents, without any farther ceremony, civil or religious. Polygamy is allowed; and one wife is always acknowledged as supreme.

The Siamese funerals considerably resemble those of the Chinese.* The body is enclosed in a wooden bier, or varnished coffin; and the monks, called Talapoins, (perhaps from their *talepan*, or peculiar umbrella,) sing hymns in the Bali tongue. After a solemn procession the body is burnt on a funeral pile of precious woods, erected near some temple; and the spectacle is often rendered more magnificent by the addition of theatrical exhibitions. The tombs are in a pyramidal form, and those of the kings large and lofty. Mourning is not prescribed by the laws, as in China: and the poor are buried with little ceremony.

The common nourishment of the Siamese consists in rice and fish, both which articles are abundant. They also eat lizards, rats, and several kinds of insects.

The houses are small, and constructed of bamboos, upon pillars, to guard against inundations, which are common in this country.

They are speedily destroyed and replaced ; and a conflagration, if a common, is at the same time a slight, calamity. Even the palaces only exceed the common habitations by occupying a more extensive space, and being constructed of timber, with a few ornaments : they are also of a greater height, but never exceed one floor.

In person the Siamese are rather small, but well made.* "The figure of the countenance, both of men and women, has less of the oval than of the lozenge form, being broad, and raised at the top of the cheeks : and the forehead suddenly contracts, and is almost as pointed as the chin. Besides, their eyes rising somewhat towards the temples, are small, and dull : and the *white* is commonly completely yellow. Their cheeks are hollow, because the upper part is too high ; the mouth is very large, with thick pale lips, and teeth blackened by art. The complexion is coarse, being brown, mixed with red, to which the climate greatly contributes."†

Hence it would appear that the Siamese are much inferior in personal appearance to the Birmans ; and rather approach to the Tartaric or Chinese features.

The dress is very slight, the warmth of the climate rendering clothes almost unnecessary.

The Siamese excel in theatrical amusements. The subjects are often taken from their mythology, and from traditions concerning their ancient heroes. They have also races of oxen, and those of boats, combats of elephants, cock-fighting, tumbling, wrestling, and rope-dancing, religious processions, and illuminations, and beautiful exhibitions of fire-works. The men are generally indolent to excess, and fond of games of chance, while the women are employed in works of industry.

Language.] Like the other languages of farther India, the Siamese has not been completely investigated, and compared with the adjacent tongues. There are thirty-seven letters, all consonants ; the vowels and diphthongs constituting a distinct alphabet. The R appears, which is not known to the Chinese, and the W. There is a considerable chant in the enunciation, as in other ancient languages. There are no inflexions of verbs or nouns ; and the idioms being very remote from those of Europe, any translation becomes very difficult. The words seem mostly monosyllabic, like the Chinese.

The Bali of the Siamese resembles that of the Birmans, and has thirty-three letters.

Literature.] In literature the Siamese are far from being deficient, and Loubere has well explained their modes of education.‡ At the age of seven or eight years the children are often placed in the convents of the Talapoins, where they are instructed in reading, writing, and accompts ; for the mercantile profession is very general. They are also taught precepts of morality : but it

* Loub. i. 81.

† Kœmpfer, i. 29, calls them negroes, so dark did their complexion appear to him ; and he compares their persons to apes.

‡ i. 180.

is to be regretted that Boodh is not only the god of wisdom, but of cunning, which is esteemed, if not a positive virtue, yet a proof of superior abilities. Books of history are not unknown, and there is an excelleent code of laws. Poetry, tales, and mythologic fables, seem to constitute the other departments of Siamese literature.

Cities and Towns.] The capital city of the kingdom has been called Siam, by the vague ignorance of the Portuguese navigators. In the native language, the name approaches to the European enunciation of Yuthia. It is situated in an isle formed by the river Meinam. The walls, in Loubere's time, were extensive ; but not above a sixth part was inhabited. Its condition, since it was delivered from the Birman conquest in 1766, has not been described.

The other chief towns in the Siamese dominions, are Bankok, at the mouth of the Meinam ; with Ogmo and others on the eastern coast of the gulf of Siam. In general these towns were only collections of hovels, sometimes surrounded with a wooden stockade, and rarely with a brick wall. As there is no recent description of the country, it would be superfluous to dwell on old descriptions of places, perhaps ruined in the frequency of oriental revolutions ; while other cities may have arisen as yet unknown in geography.

Edifices.] Kæmpfer, in 1690, visited Siam ; and his account, though brief, is solid and interesting. He minutely describes two remarkable edifices near the capital.*' The first is the famous pyramid, called Puka Thon, on a plain to the N. W. erected in memory of a victory there obtained over the king of Pegu. It is a massy, but magnificent structure, about 120 feet in height, in a square spot, enclosed by a wall. The first stage is square, each side being about 115 paces long. The others vary in form ; and there are open galleries, ornamented with columns. At the top it terminates in a slender spire.

The second edifice consists of two squares to the east of the city, each surrounded with a fair wall, and separated by a channel of the river. They contain many temples, convents, chapels, and columns, particularly the temple of Berklam, with a grand gate, ornamented with statues and other carvings : the other decorations were also, by his account, exquisite.

That intelligent voyager also describes some other edifices ; and his ideas on the subject deserve to be contrasted with those of Loubere, who, accustomed to the pomp of Louis XIV. or disgusted by the massacre of his countrymen, may in this, and some other instances, have perhaps given unfavorable representations of this celebrated country.

Manufactures.] Though the Siamese are an indolent, yet they are an ingenious people, and some of their manufactures deserve praise. They are little skilled in the fabrication of iron or steel ; but excel in that of gold, and in miniature painting. The com-

mon people are mostly occupied in procuring fish for their daily food, while the superior classes are engaged in a trifling traffic.

Commerce.] The commercial relations are chiefly with Hindostan, China, Japan, and the Dutch.

The productions of the country are grain in prodigious quantities, cotton, benjamin ; sandal, aguallo, and sapan woods ; antimony, tin, lead, iron, load-stone, gold, and silver ; sapphires, emeralds, agates, crystal, marble, and tombac.*

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, BOTANY, ZOOLOGY, MINERALOGY.

Climate and Seasons.] THE two first months of the Siamese year, which correspond with our December and January, form the whole winter of this country : the third, fourth, and fifth, belong to what is called their little summer ; the seven others to their great summer.† Being on the north of the line, their winter of course corresponds with ours ; but is almost as warm as a French summer. The little summer is their spring ; but autumn is absolutely unknown in their calendar. The winter is dry ; the summer moist ; the former is distinguished by the course of the wind, which blows almost constantly from the north, refreshed with cold from the snowy mountains of Tibet, and the bleak wastes of Mongolia.

Face of the Country.] This country, as already mentioned, is a wide vale between two high ridges of mountains, thus somewhat resembling Egypt, on a wider scale. Compared with the Birman empire, the cultivated level is not above half the extent either in breadth or length. Nor do the Siamese seem so industrious as the Birmans, as their agriculture does not appear to extend far from the banks of the river and its branches ; so that towards the mountains there are vast aboriginal forests, filled with wild animals, whence the numbers of deer and other skins, exported as merchandise. The rocky and variegated shores of the noble gulf of Siam, and the size and inundations of the Meinam, conspire with the rich and picturesque vegetation of the forests, illuminated at night with crowds of brilliant fire-flies, to impress strangers with delight and admiration.

Soil.] The soil towards the mountains is parched and barren, but the shores of the river consist, like that of Egypt, of a very rich and pure mould, in which it is even difficult to find a pebble. It is in fact a muddy deposit, accumulating from early ages, and manured, as it were, by regular inundations, so as to produce

* Dalrymple's Oriental Repertory, p. 118.

† Loubere, i. 53.

abundance of rice. The country would be a terrestrial paradise, were it not subject to the most absurd despotism, which impoverishes itself, and may perhaps be classed among the worst of governments, being far inferior to that of their neighbors, the Birmans.

Agriculture.] Agriculture, as usual in the east, is simple and primitive. The chief product is rice of excellent quality; but wheat is not unknown, in lands at a distance from the inundations. Peas, and other vegetables, also abound. Maize is confined to their gardens. From indolence or prejudice, seldom more than one crop in a year is taken from the same land.*

Rivers.] The grand river Meinam, a name which signifies the *mother of water*, is the largest among the Siamese streams. It is very deep and rapid, always full, and, according to Kæmpfer, larger than the Elbe.† He adds that the inhabitants suppose its source to be in the mountains, which give rise to the Ganges, and that it branches through Cambodia and Pegu. The inundations are in September, after the snows have melted in the northern mountains, and the rainy season has commenced. In December the waters decline, and sink by degrees to their former level. The water, though muddy, is pleasant and salutary.

The banks of the Meinam are generally low and marshy, but thickly peopled from Yuthia to Bankok, below which are wild deserts, like the Sunderbunds of the Ganges. Monkeys, fire-flies, and musketoes, swarm on the fertile shores.

To the north of the Siamese dominions, some rivers join the Meinam; but their names are unknown, and they belong to the Birman territories.

Lakes.] In the east of the kingdom a small lake is delineated, giving source to a river which flows into that of Cambodia; and it is probable that others may exist near the mountains, though unknown to geographers.

Mountains.] The extensive ranges of mountains, which enclose this kingdom on the east and west, have been repeatedly mentioned. These may be called the Siamese chains, till the native names be ascertained. A small ridge also passes east and west, not far to the north of Yuthia. In the north Siam terminates in plains; nor does it, even by conquest, seem ever to have reached the mountains on the Chinese frontier.

Forests.] The forests are numerous and large, and produce many kinds of valuable woods.

Zoology.] The chief animals of Siam are elephants, buffaloes, and deer. Horses seem little known or used, though found wild in Tibet; yet there are, or were, a few ill-mounted cavalry. The elephants of Siam are of distinguished sagacity and beauty; and those of a white color are treated with a kind of adoration, as the Siamese believe the souls of such are royal. Wild boars, tigers, and monkeys, are also numerous. The Meinam is, at distant intervals of time, infested with small poisonous serpents; and the

* Loubere. i. 50.

† i. 67, Fr. edit.

trees on its banks are, as already mentioned, beautifully illuminated with swarms of fire-flies, which emit and conceal their light as uniformly, as if it proceeded from a machine of the most exact contrivance.

Mineralogy.] There are some mines of gold, and others of copper, mixed with a variable proportion of gold; but the mines chiefly wrought by the Siamese are of tin and lead. The tin, called calin, by the Portuguese, was sold throughout the Indies, but was soft and ill refined; all of it, except that of Junkseylon, was a royal perquisite.*

Near Louvo was a mountain of load-stone: fine agates abounded in the mountains, nor were sapphires unknown.

Isles.] Among the numerous and minute isles, which owe a doubtful subjection to Siam, Junkseylon alone deserves mention. By Captain Forest's account, who visited this isle in 1784, it annually exports about 500 tons of tin, and contains 12,000 inhabitants.

LAOS.

LAOS, a country of Asia, bounded N. by the Chinese province of Yun-nan, E. by Tunquin, S. by Cambodia, W. by Siam and Ava. It is a flat country, surrounded by mountains, covered with forests, which serve as barriers against the potent kingdoms in its neighborhood, and difficult of access by water. From these mountains descend many streams, which form the large river Mecon, or Meinamkong, that crosses the whole region, from N. to S. In Mr. Dalrymple's valuable map of exterior India this grand stream is called the Kiou Long, or Maykaung; and Mr. Arrowsmith derives it from the Tibetan alps, where it is styled the Satchou, and afterwards by D'Anville, the Lan-tsan Kiang; which seems to identify it, as implying the river of Lan-tsang, or Leng, the capital of Laos.

The climate is temperate and healthful; the soil generally very good, rendered fruitful by a number of canals cut from the great river Mecon. The principal drugs are benjamin and lak. The soil is fertile in rice. It furnishes Cambodia with the best benzoin and lacca; also with musk. The forests are of great extent; on the plains are many flowers, which yield abundance of honey and wax. Here are mines of iron, lead, tin, gold, silver, rubies, and the fresh water mya, which yields pearls; the inhabitants collect those metals out of the river. The inhabitants are well-shaped and robust, and of an olive color. They are good natured, affable, courteous, upright, faithful, and obliging. When they see what pleases their fancy, they seldom cease importuning the owner till they obtain it. In case of a refusal, they never use

* Loubere, i. 287.

force. The country is very populous, containing 3,000,000,* and the inhabitants live to a great age. The Laos are not of a warlike disposition, nor expert in the use of fire-arms. If enemies make an inroad upon them, they poison their rivers. It was thus that the king of Tunquin was obliged to retreat, after having lost a great part of his army, with which, about the year 1650, he proposed to annex this monarchy to his own.

The Laos, or Lanjans, apply themselves to nothing but agriculture and fishing, neglecting all arts and sciences. They are idle and amorous ; their belief in witchcraft and magic is still more pernicious. They have a notion that if the head of an elephant be rubbed with wine, enriched with a drop or two of human gall, the beast will become more robust, and his owner more courageous. In this ridiculous conceit, the governors sometimes employ desperate fellows, who for 25 or 30 crowns, will go into the forests to hunt men ; and the first they meet with, they open his belly and stomach, while alive, and taking out the gall bladder, cut off his head, to convince the more savage purchaser he has not deceived him. In case the assassin does not perform his engagement in the limited time, he is obliged to kill himself, his wife, or child, that his employer may take out the gall of the unhappy victim.

The food of the Laos consists of rice, fish, legumes, and the flesh of buffaloes. They wear gowns close to their bodies. They go with their feet bare, and the head commonly uncovered. Their hair is clipped round, and short, excepting one lock on the temples, which is left to grow and run through holes made in the ears for that purpose. The Laos approve of having only one wife ; but they make their female slaves subject to their pleasure, whom they marry ; they choose the oldest married couple they can find, who have lived happily together, and promise before them to follow their example till death. But they often separate and marry others. When any of their relations die, they make a feast, which lasts a month ; and celebrate the funeral with great magnificence. The corpse is put in a coffin, daubed with bitumen. They employ great part of their time in repeating certain hymns, adapted to the occasion ; by means of which the soul, as they say, is taught the way to heaven. After this ceremony the relations think no more of the defunct, nor ever name him : because, according to the doctrine of the transmigration, which is received in this country, they believe the soul is gone to the place destined for it, consequently belongs no longer to them.

The language of the Laos is like that of the Siamese ; who, they say, have had the art of writing, and their sacred language, from them : but they cannot pronounce the letters L and R. They write on the leaves of trees, like the Peguese and Malabars ; but matters relating to civil affairs, are inscribed on a sort of coarse paper, with earthen pins.

The religion of the Laos, resembles that which prevails in all

* Hassel.

the countries comprised in the Farther Peninsula of the Indies. They lived a long time in form of a republic, and observed the laws of nature, rather than those of the Chinese, their neighbors. They were formerly a powerful state.* The open sky was their temple ; and they adored one being, whom they esteemed above all things, under the name of commander. Presently after the disciples of Shaka arrived in this kingdom, the Laos saw themselves surrounded with temples consecrated to idols, and priests, named talapoy, destined to their service. The king of Laos is an absolute independent prince, and acknowledges no superior, either in temporal or spiritual affairs. The property of lands lies wholly in him, who disposes, at pleasure, of the effects belonging to his subjects ; nor can any family in the kingdom inherit or possess any thing left them by will.†

The description of the various kingdoms of exterior India being thus completed, as far as the present design and the imperfect materials would admit, the geographical progress must return to the westward, and discuss the wide regions of Hindostan.

HINDOSTAN.‡

INTRODUCTION.

GENERAL OBSERVATIONS, ARRANGEMENT, NATURAL AND POLITICAL DIVISIONS, PLAN OF THIS DESCRIPTION.

General Geography.] THE description of this interesting portion of Asia is not a little difficult, from its vast and irregular extent, from the want of grand subdivisions, from the diversity of nations and powers, large foreign settlements, and other causes, so that the first object must be to determine a clear and natural arrangement.

Mr. Pennant, who often excels in geographical delineation, has, in his view of Hindoston, been contented with the vague divisions of Western, Eastern, and Gangetic, or that part which is pervaded by the Ganges, and its tributary streams. Major Rennell, to whom we are indebted for an excellent map and memoir, which have thrown great light on Indian geography, first considers the sea coast and islands ; as, in the construction of a map, the outline of the coast is the earliest object. He then describes Hindostan in four other sections : 1. That part occupied by the Ganges and its principal branches : 2. That occupied by the course of the Sindé, Sindeh, or river Indus : 3. The tract situated between the river

* Kämpfer.

† Gaz. of Eastern Continent.

‡ We copy Pinkerton's account of this country, interweaving such later information, as has come to our knowledge.

Kistna and the two former divisions : 4. The countries to the south of the Kistna, or what is perhaps improperly called the southern peninsula, as no part of Hindostan can be styled a peninsula, in the modern acceptation of being nearly surrounded by the sea.

[*General Divisions.*] The general plan adopted by Major Rennell seems to be best, not only in itself, as was to have been expected from his profound acquaintance with the subject, but as having the advantage of being familiar to the public, from the widely diffused reputation of his work. Amidst the want of important ranges of mountains, rivers alone can be assigned as natural divisions : and as in Hindostan they do not form limits, the countries pervaded by their courses and tributary streams may be considered as detached by the hand of nature. Hence the Gangetic part of Hindostan, to use Mr. Pennant's term, includes the space from the confines of Tibet to the sources of the Chumbul and Sippra, and from the mountains near Agimere and Abugur hills, to the most eastern boundary of Hindostan.

That portion watered by the Sindé or Indus, and its subsidiary streams, may in like manner be termed Sindetic Hindostan ; and as a supplement to this division may be considered the country of Sirhind, and other tracts to the west of Gangetic Hindostan.

The southern part is encompassed by the sea, except on the north, where the River Kistna and its subsidiary streams form the boundary. In ancient times this portion was styled Deccan, a native term implying the south. But the Deccan of the Hindoos extended twice as far in a northerly direction, even to the river Nerbudda ; so that it would in fact, with the Gangetic and Sindetic divisions, nearly complete the whole of Hindostan. The term Deccan is therefore here used for the portion to the south of the Kistna.

That portion on the north of the Kistna, reaching to Gangetic Hindostan on the north and east, and the Sindetic with its supplementary provinces on the north and west, may be styled Interior or Central Hindostan.

In this arrangement the Gangetic part will include Bengal, Bahar, Allahabad, Oude, Ayra, and a part of Delhi and Agimere. The Sindetic contains Kuttore, Cashmir, Cabul, Candahar, Lahore, Moultan, and Sindé.

The central division represents Guzerat in the west, with Candeish, Berar, Orissa, the Sircars, the chief part of Golconda, Vissiavour, Dowlatabad, and Concan.

The southern division includes a small portion of Golconda, Mysore, the extensive region called in modern times the Carnatic, with Madura, and other smaller districts, the western coast being called that of Malabar, and the eastern that of Coromandel. In this part is naturally included the island of Ceylon.

[*Political Divisions.*] The next topic to be considered, in a general view of Hindostan, is its political situation as divided among various powers. Of these the English is at present preponderant, not only from European tactics, but from an actual extent of territory at least equal to that of any native power. To their former

wide possessions in Gangetic Hindostan, with a large portion of the eastern coast from below the estuary of the Kistna to the lake of Chilka, and the detached government of Madras, have been recently added extensive regions in the south and west of Mysore, with Seringapatam, the capital, not to mention Bombay and other detached establishments. And the large and important island of Ceylon has been taken from the Dutch.

Next in consequence are the Maratta states, chiefly comprised in the central division of Hindostan.

The Nizam, or Soubah of the Deccan, the firm ally of the English, has considerably enlarged his territory in the south at the expense of Tippoo; the central part of whose dominions, except Seringapatam, is subject to the raja of Mysore, a descendant of the race dethroned by Hyder, an usurper.

The British, the Marattas, and the Nizam, may be regarded as the three leading powers, to which may be added on the west, or on the Sindetic division, the Seiks, and Zemaun Shah, or whatever prince holds the eastern division of Persia.

The following table, extracted, with a few alterations, from major Rennell's memoir, will convey a more complete and satisfactory idea of this important topic.

I. BRITISH POSSESSIONS.

1. Bengal and Bahar with the Zemindary of Benares.
2. Northern Sircars, including Guntoor.
- *3. Barra-Mahal, and Dindigul.
4. Jaghire in the Carnatic.
- *5. The Calicut, Palicaud, and Coorga countries.

II. BRITISH ALLIES.

1. Azuph Dowlah. Oude.
2. Mahomed Alli. Carnatic.
3. Travancore, and Cochin.

III. MARATTA STATES.

POONA MARATTAS.

1. Malwa.
2. Candeish.
3. Part of Amednagur, or Dowlatabad.
4. Visiapour.
5. Part of Guzerat.
6. —— Agra.
7. —— Agimere.
8. Allahabad.

TRIBUTARIES.

1. Rajah of Jyenagur.
2. —— Joodpour.
3. —— Oudipour.
4. —— Narwah.
5. —— Gohud.
6. Part of Bundelcund.
7. Mahomed Hyat. Bopaltol.
8. Futtie Sing. Amedabad.

* The countries thus marked, are acquisitions from Tippoo Sultan under the late treaty of Seringapatam. To which must now be added Coimbatore, Canara, and other districts acquired in 1799. See Rennel's Supplementary Map, dated 5th April, 1800.

9. Shanoor, or Sanore, Bancapour, 9. Gurry Mundella, &c. &c.
 Darwar, &c. situated in the
 Dooab, or country between the
 Kistna and Tombudra rivers.

BERAR MARATTAS.

TRIBUTARY.

1. Berar. Bembajee.
 2. Orissa.

IV. NIZAM ALI, SOUBAH OF THE DECCAN.

- | | |
|-------------------------------|------------------------------|
| 1. Golconda. | bam) and Gandicotta or |
| 2. Aurungabad. | (Ganjecotta.) |
| 3. Beder. | 7. Part of Gooty, Adoni, and |
| 4. Part of Berar. | Canoul. |
| 5. —— Adoni, Rachore, and | 8. Part of the Dooab. |
| Canoul. | [9. Other districts acquired |
| 6. Cuddapali. Cummum (or Com- | in 1799.] |

V. SEIKS.

Lahore, Moultan, and the western parts of Delhi.

As the other great power chiefly extends over Persia, and may be regarded as foreign, it only remains to mention the small states.

1. Successors of Zabeda Cawn. Sehaurunpour.
2. Jats.
3. Pattan Rohillas. Furruckabad.
4. Adjig Sing. Rewah, &c.
5. Bundelcund, or Bundela.
6. Little Ballogistan.

To which may now be added the Raja of Mysore.

The British possessions prior to the fall of Tippoo, 1799, were supposed to contain 197,496 square British miles, being about 60,000 more than are comprised in the united kingdoms of Great Britain and Ireland : the number of inhabitants was computed at ten millions. The acquisition in 1799 probably adds 15,000 square miles, and the population subject to Great Britain is supposed to be 12 or 14,000,000. The net revenue exceeded three millions before the cessions of Tippoo in 1792 computed at 400,000l.; while those in 1799 do not appear much to exceed half that sum. This great power and revenue of so distant a country, maintained in the midst of a highly civilized foreign nation, is perhaps unexampled in ancient or modern times.

The Marattas are divided into two states or empires, that of Poona, or the western, and Berar, or the eastern; each ruled by a number of chiefs or princes, who pay a nominal obedience to the paishwa, or sovereign. An account of the Marattas belongs to the central division of Hindostan. The Seiks, a new religious sect, first appeared in the middle of the 17th century, and have gradually become formidable to the neighboring states. The Jats, or Jets, were a tribe of Hindoos, who about a century ago erected a state around the capital Agra. The Afghans, another peculiar people, originated from the mountains between Persia and India.

Before closing these general considerations with regard to this extensive country, it may be proper to observe, that the name of Hindostan has been considered as synonymous with the empire of the great Mongul. But the power of the Monguls, which commenced under Baber, 1518, was most eminent in the northern parts, the Deccan, or south, remaining unsubdued till the time of Aurunzeb, 1678, when that region, with what is called the peninsula, a few mountainous and inaccessible tracts only excepted, were either vanquished or rendered tributary to the throne of Delhi.* When Aurunzeb died in 1707, in his 90th year, the Mongul empire had obtained its utmost extent from the 10th to the 35th degree of latitude, (about 1750 miles,) and about as much in length : the revenue exceeding thirty-two millions sterling, in a country where provisions are about four times as cheap as in England, or America. The number of his subjects may be computed at about 60,000,000. But this great power declined so rapidly that, within 50 years after his death, it may be said to have been annihilated, and the empire of the great Mongul has vanished from modern geography.

The plan to be pursued, in the subsequent brief account of Hindostan, has been above indicated, as divided into four parts ; the region on the Ganges, those on the Indus, the central, and the southern. In three of these divisions the British possessions are powerful, if not predominant ; and it is difficult to connect the political with the natural geography. Doubts may justly arise, whether the British territories ought not to form a separate and distinct portion in a perspicuous arrangement, this being another of the peculiar difficulties which attend the geography of Hindostan. But as the grand mass of the population in these settlements consists of native Hindoos, and the natural geography of the country must not be sacrificed to any extraneous consideration, it still seems preferable to abide by the division already laid down. Hence that form of description must be chosen, which, resting on the perpetual foundations of nature, cannot be injured or obliterated by the destinies of man.

These considerations being premised, a similar arrangement shall here be followed in describing Hindostan, a labyrinth of eastern geography, with that used in delineating Germany, that labyrinth of European geography. A general view of the whole region shall be followed by successive chapters on each of the above divisions ; in which the several states, chief cities, and other geographical topics shall be briefly illustrated.

* Rennell's Memoir, page lxi.

CHAPTER I.

GENERAL VIEW OF HINDOSTAN.

NAME, EXTENT, BOUNDARIES, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORY, CHRONOLOGY, HISTORICAL EPOCHS, ANCIENT MONUMENTS, MYTHOLOGY, RELIGION, GOVERNMENT, LAWS, POPULATION, GENERAL REVENUES, POLITICAL IMPORTANCE, MANNERS AND CUSTOMS, LANGUAGES, LITERATURE, ANCIENT CIVILIZATION, UNIVERSITIES, INLAND NAVIGATION, MANUFACTURES, NATIVE PRODUCTS, CLIMATE AND SEASONS, GENERAL FACE OF THE COUNTRY, SOIL, RIVERS, LAKES, MOUNTAINS, DESERTS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES.

Name.] THE original name of this celebrated country is said to be in the ancient Sanscrit language Bharata.* That of Hindostan seems to have been imposed by the Persians, and derived, like the classical name India, from the great western river, with the Persian termination *Tan*, or *Stan*, which signifies a country. It was long known, as already mentioned, by the name of the Empire of the Great Mongul, because it was then subject to Mongul emperors successors of Timur.

Extent.] This portion of Asia extends from cape Comari, called by navigators Comorin, in the south, to the mountains which form the northern boundary of Cashmir ; that is, according to the most recent maps, from about the 8th to about the 35th degree of northern latitude, being 27 degrees, or 1620 g. miles, nearly equal to 1890 British. The northern boundary may be yet farther extended to the Hindoo Koh, and mountains running E. and W. on the north of the province of Kuttore.

From the river Araba, on the west of the province of Sinde, to the mountains which divide Bengal from Cassay and the Birman dominions, that is from about the 66th to the 92nd degree of east longitude from Greenwich, there are 26° which in the latitude of 25° constitute a breadth of more than 1400 g. miles, or 1600 British. Comparatively if we exclude Scandinavia, the former kingdom of Poland and the Russian empire, the extent may be considered as equal to that of the remainder of Europe.

Boundaries.] The boundaries are marked on the north by the mountains above mentioned. On the west, towards Persia, other ranges and deserts constitute the frontier till the southern separation ends in the river Araba. The other boundaries are supplied by the Indian ocean, and Bay of Bengal, where the eastern extremity is limited by the little river Naaf, and those mountains which divide the British possessions from Aracan, Cassay, and Cashur. The northern boundary generally consists of the south-

* Rennell, xx. from Wilkins : but the proper native term seems to be Medhyama, and Bharat was the first king. As. Res. i. 419.

ern ridges of the Tibetan Alps. On the N. E. of Bengal a similar ridge divides Hindostan from the small territory of Asam, which seems an independent state, never having formed a portion of Hindostan, of dubious connection with Tibet, and as yet unsubdued by the Birmans.

Original Population.] The original population may be generally considered as indigenous, or in other words peculiar to the country. Yet in so extensive a region, and amidst the great diversity of climate and situation, the native race presents considerable varieties, especially as being fairer in the northern parts, and in the southern almost or wholly black, but without the negro wool or features. Still the tinge of the women and superior class is deep olive, with sometimes a slight and agreeable mixture of the ruddy, and the Hindoo form and features may be said to approach the Persian or European standard. The sole ancient conquests of Hindostan having proceeded from the N. W. and W. there may be some slight admixture of the Persians, of the Greeks of Bactriana, and of the ancient Scythians. More recently Mahmud of Ghizni, introduced a group of Mahometans of various origins. The Patans or Afghans proceeded from the mountains toward Persia, being asserted to be a tribe of Albanians, who emigrated to the eastward. The Monguls are well known to have included many Tartars, and Mahometan tribes from the east of the Caspian. These, with the Arabs and Persians, are generally called Moors.

Progressive Geography.] The progressive geography of Hindostan may be said to begin with the victories of Alexander the Great. After the age of this prince many Greek and Roman authors, particularly Strabo, Arrian, and Pliny, have left information concerning the state of India. One of the most important ancient records is the description and map of Ptolemy, but they are so much distorted as to embarrass the most learned inquirer.

This celebrated country received little farther illustration till the 6th century : the intelligence however of Cosmas is of no consequence, except as it elucidates the Persian traffic with India. Some materials may also be derived from the accounts of the Mahometan travellers in the 9th century, and the oriental works of geography ; nor was the great English king, Alfred, incurious concerning this celebrated region.* Marco Polo, the father of eastern geography as known to Europeans, was followed by other travellers ; and at length the Portuguese discovery of the Cape of Good Hope, gradually led the way to the precision of modern knowledge, to which Major Rennell, has contributed with great success and deserved celebrity.

History.] The history of Hindostan, is obscure and embarrassed, as either no native chronicles were written, or they were destroyed

* The Saxon chronicle, and other English writers, mention that Suithelm bishop of Shireburn carried a present from Alfred to the shrine of St. Thomas in India, and returned in safety with some curiosities from the country. This Thomas was not the apostle, but some Nestorian missionary ; and his shrine is at Melapour, near Madras, on the coast of Coromandel. Alfred little foresaw that an English settlement was to include this holy ground.

by the Bramins, anxious to obliterate the memory of former and happier ages, when their inordinate power was not established. Sir William Jones, and Anquetil du Perron, have bestowed some attention on this subject; but their investigations are more interesting to the antiquary, than to the general reader.* The native traditions seem to describe the northern part of Hindostan, as subject to one rajah or sovereign, which is little probable, as the most ancient extraneous accounts represent this wide country divided, as was to be expected, into many monarchies. By all accounts, however, the Deccan, or southern part, was subject to a distinct emperor, even to modern times. "Its emperors of the Bahmineah dynasty, (which commenced with Hassan Caco, A. D. 1347,) appear to have exceeded in power and splendor those of Delhi, even at the most flourishing periods of their history. The seat of government was at Calberga, which was centrical to the great body of the empire, and is at this day a considerable city. Like other overgrown empires, it fell to pieces with its own weight, and out of it were formed four potent kingdoms, under the names of Visiapour (properly Bejapour), Golconda, Berar, and Amednagur, of whose particular limits and inferior members we are not well informed. Each of these subsisted with a considerable degree of power until the Mongul conquest; and the two first, as we have seen above, preserved their independency until the time of Aurungzebe."†

Chronology.] The Hindoo chronology published by Anquetil du Perron, is that of the rajas or sovereigns of Bengal; and the most remarkable facts are repeated invasions by the Persians, one of them supposed to be fourteen centuries before the Christian era. This kingdom of Bengal seems to have included almost the whole of Gangetic Hindostan. But the names and extent of the early kingdoms of Hindostan are little known or investigated.

Historical Epochs.] The Hindoo epochs consisting of millions of years, and other fabulous circumstances, have hitherto attracted more attention than a clear arrangement of the Hindoo sovereignties, and an account of the most authentic facts that can be recovered concerning them. While these chronologies differ by one or two thousand years concerning the incarnation of Buddha, we may judge of their exactness in less important events.

The Hindoos never seem to have boasted of one native historian, and the best materials are derived from Persian memoirs; from which Ferishta himself, a Persian, compiled his histories of Hindostan towards the beginning of the seventeenth century. Indeed in the whole complex maze of Hindoo literature there is a striking deficiency of good sense.‡ In this defect of native records we

* Asiatic Researches, vol. ii. and Bernoullis's collection concerning India. Berlin, 1786, 4to. tome ii. † Rennell, lxxix.

‡ Mr. Bentley observes, As. Res. v. 315, that the Hindoo eras and dates are all blended together into one mass of absurdity and contradiction. A curious instance of this appears with regard to the celebrated temples of Ellora, and the singular fortress of Deoghir, or Dowatabad, formed on a high conic rock; for the Mahometans, whom we Europeans regard as rather extravagant in chronology, say that they were erected 900 years ago; while the Bramins affirm that they have stood not less than 7894 years! As. Res. vi. 385.

must be contented with the epochs derived from foreign sources.

1. The invasion by Alexander the Great, who found western India divided among numerous potentates, though he advanced little farther than Lahore. If even the northern half of Hindostan had been subject to one sovereign, as fabled in the native tales, the circumstance would have been clear and apparent.

2. At a long interval appears the conquest of the north-western part by Mahmoud of Ghizni, A. D. 1000.

3. The dynasty of the Patan, or Afghan emperors begins with Cuttub, A. D. 1205, and ends with Mahmoud III. 1393.

4. The great Moguls or Mongul emperors begin with Babar, 1525; and continued, with a short interruption, by the Patans to Shah Aulum, to 1760.

The invasion by Timur, and, at a distant interval, that by Nadir, also form remarkable epochs in the history of this passive country. The latter may be said to have virtually dissolved the Mogul empire. The Portuguese settlements were followed by those of the Dutch. The French power began to predominate in 1749, but speedily closed in 1761, with the loss of their principal settlement Pondicherry. As merchants the English had long held small settlements in Hindostan; but the expedition into Tanjore, 1749, was the first enterprise against a native prince. Other contests followed concerning Arcot, in the kingdom of Carnada, or what we call the Carnatic. In 1756, the fort of Calcutta, the chief settlement of the English in Bengal, was taken by the nabob, and many of their brave countrymen perished in a shocking manner, from being confined in a small chamber. The battle of Plassey, fought in June, 1757, laid the foundation of the subsequent power of Britain. Lord Clive, governor of Bengal, 1765, obtained a grant from the nominal Mogul, of Bengal, Bahar, and part of Orissa, on condition of an annual tribute. Soon after the English were engaged in a contest with Hyder Alli, a soldier of fortune, who had dethroned the lineal sovereign of Mysore, and extended his conquests to the adjacent territories. Some conflicts followed on the confines of Carnada and Mysore; but the event was little advantageous to either party. Hyder, dying in 1783, was succeeded by his son Tippoo, who seems to have been a prince of inferior abilities, and expiated his ill arranged plans by his death, and the partition of his territories, in 1799.

The Bengal provinces have been in possession of the British since 1765; and Benares was added in 1775. This portion might constitute a considerable kingdom, and is sufficiently compact and secure by natural advantages, independently of a formidable force. The Sircars, or detached provinces, partly belong to Golconda, and partly to Orissa, forming a long narrow slip of country from twenty to seventy-five miles wide, but about three hundred and fifty in length. The word Sircar is almost synonymous with an English county, implying a division of a Souba, or great province; and these detached Sircars, or counties, being to the north of Madras, on which they are dependent, are commonly styled the

northern Sircars.* In 1754, they were acquired by the French ; and conquered by the English, under Colonel Clive, in 1759.

The English settled at Madras about the year 1640 ; and their territory here extends about 108 miles along the shore, and 47 in breadth, in the centre of the ancient kingdom of Carnada. The recent and extensive acquisitions in the south have been already mentioned.

Nor among the modern historical epochs of Hindostan must the celebrated battle of Panniput, not far to the N. W. of Delhi, be omitted, which was fought in 1761, between the Mahometans under Abdalha, king of Candahar, and the Marattas, in which the latter were defeated : the Mahometans were computed at 150,000, and the Marattas at 200,000.

Ancient Monuments.] The ancient monuments of Hindostan are very numerous, and of various descriptions, exclusive of the tombs and other edifices of the Mahometan conquerors. Some of the most remarkable are excavated temples, statues, reliefos, &c. in an island near Bombay.† The idols represented seem clearly to belong to the present mythology of Hindostan ; but at what period these edifices were modelled, must be left in the darkness of Hindoo chronology. Several ancient grants of land, some coins, and seals, have also been found. Yet all these remains little correspond with the exaggerated ideas entertained concerning the early civilization of this renowned country ; while the Egyptian pyramids, temples, and obelisks, strongly confirm the accounts preserved by the ancient historians.

Mythology.] Though the mythology of the Hindoos may pretend to great antiquity, yet their present form of religion is supposed to vary considerably from the ancient. It is inferred that while the religion of Boodha, still retained by the Birmans and other adjacent nations, was the real ancient system of Hindostan, the artful Bramins have introduced many innovations in order to increase their own power and influence. In a system so full of imagination it is no wonder, that the analyses are sometimes discordant, but it appears that the fabric rests on that almost universal system of the east, the belief in a supreme Creator too ineffable and sublime for human adoration, which is therefore addressed to inferior, but great and powerful, divinities.

Religion.] The religion of the Hindoos is artfully interwoven with the common offices of life ; and the different casts are supposed to originate from Brahma, the immediate agent of creation, under the supreme power, in the following manner :

The *Brahmin* from the mouth (wisdom) : To pray, to read, to instruct.

The *Chehteree*, from the arms (strength) : To draw the bow, to fight, to govern.

The *Brice*, from the belly or thighs (nourishment) : To provide the necessities of life by agriculture and traffic.

The *Sooder*, from the feet (subjection) : To labour, to serve.‡

* Rennell, cxxxiv. † As. Res. vol. i. and vi. ‡ Robertson's Disquisition, p. 333.

The ancients sometimes enlarged the number of these casts, or perpetual orders of men, by an erroneous subdivision of two or more, yet it is impossible to read their accounts without perceiving that the casts themselves existed from time immemorial, but with one important variation. For it would appear that in ancient times the Brahmans, like the priests, or monks of Ava, Siam, and other states, which still follow the worship of Boodh, were not hereditary or a distinct levitical tribe, but that any member of the other casts might enter into this order, which was of course deemed inferior to the chief secular or military cast. At present the meanest Brahmin will not condescend to eat with his sovereign. Setting the ridiculous and fanciful tales of this interested tribe wholly out of the question, it would appear that in the usual circle of human affairs, a contest had arisen between the regal and ecclesiastical powers. The latter, instead of being subdued, as in China and Japan, acquired the superiority, as in Tibet. But in Hindostan, from a most refined and cunning policy, the priesthood asserted the divine institution of the several casts, and as was natural, pronounced their own to be the supreme, and possessed of innate and hereditary sanctity.

Government.] Hindostan is now divided into many governments, the form of which must be considered in describing the several states. Suffice it here to observe, that though the Brahmans be the most dignified cast, yet there do not seem to have been one or more high priests, as in the surrounding countries. The sovereignty was abandoned to the military cast, and the monarch was presumed to be the proprietor of all the lands, except those belonging to the church. The Ryots held their possessions by a lease, at a fixed rate, and considered as perpetual. The Zemindars were in the opinion of some, only collectors of the royal rents from the Ryots or farmers; but according to others, the Zemindars were landed gentlemen, who had a hereditary right to these rents, upon paying a settled proportion to the crown.

Laws.] The laws of the Hindoos are intimately blended with their religion, and the curious reader may consult the code, translated and published by the direction of Mr. Hastings.

Population.] The population of this extensive part of Asia, is supposed to amount to sixty millions, of which the British possessions may now perhaps contain a quarter, especially as frequent recent conflicts have thinned the population in many other parts of Hindostan. When it is considered that China is about one quarter less than Hindostan, and yet is said to contain 383 millions, we may judge of the boasted effects of Hindoo philosophy, more fit for the visionary call of the recluse, than to promote enterprise and industry.

General Revenues.] The general revenues of Hindostan were computed in the time of Aurunzeb, as already mentioned, by a precise calculation of those of the several provinces, at thirty-two millions sterling; equal perhaps, considering the comparative price of products, to one hundred and sixty millions sterling in modern England.

Political Importance.] The political importance and relations of Hindostan are now divided among many powers. So miserable was the internal constitution that this wide and populous country, defended on all sides by ranges of mountains, has in all ages fallen a prey to every invader. The fantastic institutions, like those of the ancient Persians, prevent the Hindoos from forming a maritime power ; and even the small fleets of Siam and Pegu, which follow the more liberal doctrines of Boodh, seem unrivalled in the history of Hindostan.

Manners and Customs.] The manners and customs of the Hindoos are intimately blended with their religion, and are universally similar, with a few exceptions in mountainous and other peculiar districts. One of the most singular begins to expire, that of giving the living widow to the same flames with her husband's corpse. The ancients represent the Bramins as accustomed to terminate their own lives on funeral piles lighted by themselves. But by what refinement of cruelty this custom was extended to involuntary and helpless females, has not appeared ; perhaps the cause was to enforce the preservation of their husband's health, by making their life depend on his. But this and other monstrous institutions of the Bramins are treated with lenity, and even respect, by many authors, who seem to inherit the Greek astonishment at these fanatics.

The other manners and customs of the Hindoos have been illustrated by many travellers. As soon as a child is born, it is carefully registered in its proper cast, and astrologers are consulted concerning its destiny ; for the Hindoos, like the Turks, are strict predestinarians. A Bramin imposes the name. The infant thrives by what we should call neglect ; and no where are seen more vigor and elegance of form. The boys are generally taught reading and writing by Bramins, but the girls are confined at home till their twelfth year.* Polygamy is practised, but one wife is acknowledged as supreme. It is well known that the Hindoos are extremely abstemious, and wholly abstain from animal food and intoxicating liquors ; yet if we judge from the fanatic penances, suicides, and other superstitious frenzies, no where on earth is the mind so much disordered. The houses are built of earth or bricks, covered with mortar, and sometimes with excellent cement, with no windows, or only small apertures. There is generally only a ground floor, inclosing a court, with a small gallery, supported by slight wooden pillars. The amusements consist of religious processions ; but though dancing girls abound, yet theatrical exhibitions do not seem so common, as in the countries farther to the east.

Languages.] The general ancient language of Hindostan is believed to have been the Sanscrit, an original and refined speech, compared by Sir William Jones with the Greek and Latin. The more common dialects are chiefly the following.†

* See a voyage to the East Indies by Fra. Paolino da San Bartolomeo, 1800, 8vo. The author's lay name was Wesdin, an Austrian.

† Wesdin, 317.

1. That of Kandi, in the interior of Ceylon, which is said nearly to resemble the Sanscrit.
2. The Tamulac, used in the Deccan, or southern part, in Madura, Mysore, and some parts of the Malabar coast.
3. The Malabar language, extending from cape Comari to the mountain Illi, which divides Malabar from Canara.
4. That of Canara, which extends as far as Goa.
- “ 5. The Marashda language. It is prevalent throughout the whole country of the *Marashdi*, who are very improperly called *Marattas*.
- “ 6. The Talenga, an harmonious, nervous, masculine, copious, and learned language, which, like the Sanscrit, has fifty-two characters ; and these are sufficient to write the latter. It is spoken on the coast of Orixa, in Golconda, on the river Kishna, and as far as the mountains of Balangat. All these languages have their own alphabets : so that in every province you must make yourself acquainted with a distinct kind of characters, if you wish to express your thoughts in the dialect common in each.
- “ 7. The common Bengal language : a wretched dialect, corrupted in the utmost degree. It has no V, and instead of it employs the B. It is spoken at Calcutta, and in Bengal, on the banks of the Ganges.
- “ 8. The Devangaric, or Hindostan language, called by some Nagru, Nagari, and also Devanagari. It is spoken at Benares, or Venares, and consists of fifty-two characters, with which the Sanscrit may be written.
- “ 9. The Guzaratic, which has been introduced not only into the kingdom of Guzarat, but also at Barsche, Surat, Tatta, and the neighborhood of the Balangat mountains. Its characters are little different from those of the Devanagaric.
- “ 10. The Nepalic, which is spoken in the kingdom of Nepaul, and has a great similarity to the *Devanagaric*. ”

Literature.] The literature of Hindostan doubtless contains several valuable and curious monuments ; but their epochs are extremely uncertain. There seems no chronology of authors, who successively quote or mention each other ; and there is not even any great land mark, like the age of Confucius, among the Chinese. Hence little else than confusion and contradiction are to be found in the numerous accounts published of Hindoo literature.

The most important books are the Vedas ; there are also some epic poems, which pretend to contain fragments of genuine history. “ The most ancient, called Ramayna,* was written by Valmeeki, and next in celebrity, is the Mahabarat of Vyasa, who is said to have been the author of some Puranas, and of course could not have flourished above seven hundred years ago ; and it is probable that the more ancient poem cannot aspire to a much higher date. It is a great singularity that the old Hindoo grants

* This work has been translated by Rev. Drs. Carey, and Marshman, and printed at Serampore, in 1806.

of land, many of which have been translated and published, are extremely long, and in a strange poetical or inflated style, some of the compound words consisting of not less than one hundred and fifty syllables! When we compare these singularities with the brevity and clearness of the Greek and Roman inscriptions, and the unbiassed dictates of plain good sense, we are led to conclude that the Hindoos are the puerile slaves of a capricious imagination. And though some translations of their best works have already appeared, they have not acquired the smallest degree of European reputation; and have very little interested a few curious inquirers, though eager to be pleased. To compare such tedious trifles, alike destitute of good sense, vigorous genius, or brilliant fancy, with the immortal productions of Greece or Rome, would only confirm the idea, that the climate itself impairs judgment, while it inflames imagination.

The Hindoos are ignorant of the Chinese art of printing, nor have we any rules for determining the antiquity of their manuscripts. To an exact inquirer this would have been the first topic of investigation; but it has, on the contrary, been completely neglected. We have merely the bold assertions of Bramins, eagerly imbibed by European credulity, instead of successive arguments and proofs.

Ancient Civilization.] The ancient civilization of the Hindoos has probably been greatly exaggerated, both with regard to its degree, and its duration; they are nevertheless at present in general highly civilized, and of gentle and amiable manners. But perhaps in no art nor science are they equal to the Chinese or Japanese; and in most are confessedly greatly inferior.

Universities.] The chief university in the north, is that of Benares, a most celebrated and ancient school, now included in the English possessions. In the Deccan, the academy of Triciur, on the Malabar coast, is also in great repute. "At Cangiburam, in Carnate, there is still a celebrated Brahman school, which, according to the testimony of Ptolemy, existed in the first century of the Christian era; and its members are certainly equal in celebrity to the Brahmans of Vanares, or Benares.* It is to be hoped that the recent acquisitions in the south will lead to the discovery of new literary treasures in that quarter, where it is to be expected that native knowledge is more perfect, than in the north, where it was so long trampled under foot by the Mahometan conquerors.

Inland Navigation.] With respect to inland navigation, Hindostan forms a striking contrast with China. In the 14th century, Feroz III. of the Patan dynasty, ordered some short canals to be dug in the neighborhood of Delhi; and had an intention of uniting the Ganges with the Indus, or Setlege. This intended canal, which would not have been above one quarter the length of the great canal of China, has been praised, as a wonderful design; a sufficient proof of the great inferiority of the Hindoos, and their Mahometan victors, in the solid and useful arts.

* Wesdin, 283.

Manufactures.] The manufactures of Hindostan have been celebrated from early antiquity, particularly the muslins and other fabrics from cotton. Piece goods are mentioned by the author of the *Periplus*, and other ancient writers, who praise the manufacture and its beautiful colors. The Hindoos, in the time of Strabo, were also noted for elegant works in metals and ivory. Nor is Hindostan celebrated at this day for any manufacture, except those of muslins and calicoes, the other exports consisting of diamonds, raw silks, with a few wrought silks, spices, drugs, &c. The shawls of Cashmir are also deservedly esteemed; being there woven from a material chiefly supplied by Tibet. Painting is in its infancy; and they are strangers to shade and perspective. Sculpture is as little advanced as painting, the design and execution being alike bad; yet the temples are sometimes majestic and solemn. In most trades very few tools are employed. The simple loom is reared in the morning under a tree, and carried home in the evening.

Native Products.] It is the abundance of native products, which has in all ages rendered Hindostan the centre of great trade. Diamonds, and some other precious stones, are products almost peculiar; as well as many spices, aromatics, and drugs. In modern times the tea and porcelain of China, and other oriental articles, have been vaguely included among those of the East Indies. But rice, sugar, and many articles of luxury, are products of Hindostan.

Climate and Seasons.] The climate and seasons are considerably diversified by difference of latitude, and local situation. Yet in general, though the northern Alps of Tibet be covered with perpetual snow, there is some similarity of climate through the wide regions of Hindostan. In Bengal the hot, or dry season, begins with March, and continues to the end of May, the thermometer sometimes rising to 110° : this intense heat is sometimes interrupted by violent thunder storms from the northwest, the seat of the grand Alps of Asia. The rainy season continues from June to September: the three last months of the year are generally pleasant; but excessive fogs often prevail in January and February. The periodical rains are also felt in Sindetic Hindostan, except in Cashmir, where they seem to be excluded by the surrounding mountains. In the rest of Hindostan they almost deluge the country, descending like cataracts from the clouds, and the Ganges and other rivers spread to a wide extent, the inundation ceasing in September. By the latter end of June the Ganges has risen fifteen feet and a half, out of thirty-two, which is the total of its overflow.* In the mountains the rainy season begins early in April; but rarely in the plains till the latter end of June. "By the latter end of July all the lower parts of Bengal, contiguous to the Ganges and Burampooter, are overflowed, and form an inundation of more than a hundred miles in width; nothing appearing but villages and trees, excepting very rarely the

top of an elevated spot (the artificial mound of some deserted village) appearing like an island."

In the southern division the chains of the Gauts, or mountains of Malabar and Coromandel, supporting the high table land in the centre, intercept the great mass of clouds ; and the alternate S. W. and N. E. winds, called the Monsoons, occasion a rainy season on one side of the mountains only, that is, on the windward side. Yet it appears that during the first part of the rainy monsoon, in May and June, on the coast of Malabar, a considerable quantity of rain falls in the upper region, or table land, of Mysore. The monsoon is from the N. E. from October to April ; and from May to September in the opposite direction. The rainy season on the coast of Coromandel is with the N. E. monsoon ; and on that of Malabar with the S. W. : in general March, April, May, and June, are the dry months.

Hence, while in Tibet the winter nearly corresponds with that of Switzerland and the rest of Europe, in the whole extent of Hindostan, except in Cashmir, there can hardly be said to be a vestige of winter, except the thick fogs of an English November : and excessive rains, or excessive heats, form the chief varieties of the year.

General Face of the Country.] The aspect of this wide country is greatly diversified ; but in general there are no mountains of any considerable height, the highest Gauts in the south not being estimated at above three thousand feet. The frontier mountains of Tibet are of small elevation, compared with those of the interior of that country ; and the wonderful extent of Hindostan consists chiefly of extensive plains, fertilized by numerous rivers and streams, and interspersed with a few ranges of hills. The periodical rains and intense heats produce luxuriance of vegetation, almost unknown to any other country on the globe ; and the variety and richness of the vegetable creation delight the eye of every spectator.

Soil.] The soil in some places consists of black vegetable mould, to the depth of six feet. Rice is the chief grain ; and on the dry sandy lands of the coast of Coromandel, great industry is displayed in watering it.*

Maize and the sugar-cane are also favorite products. Great attention to manure seems far from being so general as in China, or Japan ; nor perhaps is it necessary. The cultivation of cotton is also widely diffused ; and this plant particularly thrives on the dry coast of Coromandel.

Rivers.] In describing the large and numerous rivers of Hindostan, the Ganges and Indus shall be first considered, with their chief tributary streams ; and a short account of the principal rivers in the central part shall be followed by those in the southern division. This arrangement naturally arises from the four grand divisions formerly mentioned.

The Ganges must still be considered as the sacred sovereign of

* Sonnerat, i. 106.

the Hindoo rivers, an attribute not infringed by the recent discovery of the Burrampooter. It receives such a number of important tributary streams, that its magnitude exceeds what might have been expected from the comparative length of its course ; which may however be estimated at about fourteen hundred British miles, while the Hoan-ho of China has been computed at two thousand, and the Kian-ku at two thousand two hundred. The source of the Ganges remains a curious object of investigation ; nor can much reliance be placed on its delineation in the map of Tibet, by the Chinese Lamas, published by Du Halde, and followed by all succeeding geographers. Tieffenthaler has laid down the latitude of the noted Gangoutra, or Cow's mouth, in lat. 33° , being a celebrated cataract, where the Ganges is said to pass through a vast cavern in a mountain, falling into a large basin, which it has worn in the rock. At Hurdwar, about two hundred and eighty miles to the south of the Cow's mouth, (if this last be not a dream of the fabling Hindoos,) the Ganges enters the wide plains of Hindostan ; and pursues a south-east direction by the ancient city of Canoge, once the capital of a kingdom, by Allahabad, Benares, Patna, &c. till dividing into many grand and spacious mouths, it forms an extensive delta at its egress into the gulf of Bengal. The extreme mouths of the Ganges are intersected with isles, called the Sunderbunds, overgrown with tall bamboos and other luxuriant vegetation, the impenetrable haunts of the royal tiger, and other beasts of prey. On the westernmost outlet of the Ganges, called the Hoogley, or Ugli, stands Calcutta, the capital of British Hindostan. This, and the most eastern, which receives the Burrampooter, are the widest and most important branches.

The noblest tributary stream of the Ganges is the Burrampooter, or as styled by the people of Asam, the Burrampoot, being the Sampoo of the Tibetans. The course of the river, and its junction with the Ganges, were first ascertained by Major Rennell. This noble river runs for four hundred miles through the British territory ; and for the last 60 miles before its junction with the Ganges, is from four to five miles wide. On their union below Luckipour, they form a body of running fresh water, resembling a gulf of the sea, interspersed with islands, some of which rival in size and fertility the Isle of Wight. In the mouths of the Ganges, and the Megna, or Burrampoot, the bore or sudden influx of the tide will rise instantaneously to the height of from five to twelve feet.* Between Bengal and Tibet, the Burrampoot passes through the country of Asam, a region hitherto little known, and which may be here briefly described. It is divided into two parts by the river ; the northern being called Uttercul, and the southern Dachincul. The mountains of Duleh, and Landa, divide Asam from Tibet.† Asam is intersected by several streams which run into the Burrampoot ; among which is the Donec, in the south, the environs of which present fields, groves, and gar-

* Rennell, 358.

† As. Res. ii. 171.

dens. Among the products are many kinds of valuable fruits, with pepper, cocoa nuts, sugar, and ginger. The silk is said to equal that of China; nor are the musk deer unknown. The northern province, Uttarcul, surpasses the southern in tillage and population; gold and silver are said to be found in the sand of the rivers, and to furnish employment to many of the natives. The Hindoo tenets are not known by the generality, though there be some Bramins, and the vulgar dialect somewhat resembles that of Bengal. The raja, or king, resides at Ghargon, the capital, which, by this account, stands on the south of the great river: it is fenced with bamboos, and has four gates, constructed of stone and earth. The palace, public saloon, &c. seem rudely to resemble those of the Birmans. The natives are a stout and brave race; and repeatedly foiled the invasions of the Moguls.

The course of the Burrampoot is supposed to be nearly equal in length to that of the Ganges. The sources of these great rivers are stated to be very near, yet they separate to the distance of more than a thousand miles, and afterwards join in their termination.

The most important tributary streams which swell the Ganges, are the Gagra, also called Sarjoo, (a great part of whose course, like those of the Cosa and Teesta, belong to Tibet); the Jumna, or Yumena, which receives many considerable rivers from the south, particularly the Chumbul and the Betwa: and lastly the Soan.

The Gagra, after pursuing a long course from the mountains of Tibet, pervades the province of Oude.

The Jumna rises from the mountains of Sirinagur, pursuing nearly a parallel course to the Ganges, on the west, as the Gagra does on the east; but its comparative course has not exceeded five hundred miles when it flows into the Ganges at Allahabad. By receiving numerous and extensive streams from the south, the Jumna contributes greatly to increase the breadth of Gangetic Hindostan; and the Chumbul, which joins the Jumna, is itself swelled with many tributary streams.

The Soan is said to spring from the same lake with the Nerbuda (which flows in an opposite direction to the gulf of Cambay,) and joins the Ganges not far below its union with the Gagra. Several streams of smaller account fall into the Hoogley, or western branch of the Ganges.

The Indus, and its confluent streams, form the next object. This celebrated river is by the natives called Sendé, or Sindeh, and in the original Sanscrit, Seendho. It is also called Nilab, or the Blue River. The source, like that of the Ganges, remains unknown. From the map of Islenieff, 1777, it appears that the chain of mountains which gives source to the Amu, or Gihon, on one side, and on the other to the rivers of Little Bucharia, is that of the Belur Tag, or Cloudy mountains; from the eastern side of which chain the Indus seems to arise. Its comparative course may be about a thousand British miles, when it forms a delta in the province of Sindé, entering by many mouths into the Indian sea.

The tributary rivers of the Sindé chiefly join it in the northern half of its course, where they form the Panjab, or country of five rivers. From the west run into the Indus the Kameh, with its tributary streams, and the Comul : from the east the Behut, or Hydaspes ; the Chunab, or Acesinas ; the Rauvec, or Hydrastes ; and the Setlege, or Hesudrus, with a tributary stream on the west, the Hyphasis ; the Panjab country being on the east of the Sindé. The whole of this part of Hindostan is little known to the moderns ; and it is uncertain whether the Caggar, a considerable and distant river to the east, join the Sindé, or fall into the gulf of Cutch.*

Having thus briefly described the most important rivers in the two first grand divisions of Hindostan, those of the central part must next be considered, being chiefly the Pudda, Nerbudda, and Taptee, on the west ; and on the east the Subanreka, or Subunreka, which joins the sea about thirty miles to the west of that mouth of the Ganges called the Hoogley, or more properly, from a city on its shore, the Ugli. The Subunreka being here considered as the N. E. boundary of Central Hindostan, is followed by the Bramnee, the Mahanada ; and after passing the little streams of the Sircars by the Godaveri, the last and most important stream of Central Hindostan.

The Godaveri rises at Trimbuck Nassor, in the western Gauts, more properly called the Suckhien mountains, from several sources, about seventy miles to the N. E. of Bombay.† This great river was little known in Europe till recent times ; and is also called the Ganga, a Hindoo term for a river in general, though applied by pre-eminence to the Ganges.‡ About ninety miles from its egress into the sea, the Godaveri receives a large river, the Bain Gonga, which pervades immense teak forests in a singular wild country inhabited by savages, in the centre of Hindostan, and as yet little known or explored. The Bain Gonga was first discovered to Europeans by the late Colonel Camac, its course being about four hundred miles, while that of the Godaveri may be seven hundred. This last great river, like another Nile or Ganges, fertilizes the country ; and from the benefits which it confers is esteemed sacred. Besides the Bain or Baun Gonga, it receives many tributary streams, as the Burda and others from the north ; and from the south a circuitous large river, the Munzora, which passes by Beder.

The next in consequence, in the central division of Hindostan, is the Nerbudda, which may be called a solitary stream, as it receives so few contributions. Its course is almost due west, and about equal to that of the Godaveri. The Taptee, which passes by Surat, is also a considerable river, about four hundred miles in length. To the south of this river the superior elevation of the Sukhien mountains, or western Gauts, diffuses all the rivers towards the east.

* Major Rennell's excellent map may here be compared with that of de la Roche, published by Faden, 1788, which is well executed, and compiled with great care.

† As. Res. v. 1. 5.

‡ Rennell, 244.

In the arrangement here followed, the Deccan, or most southern part of Hindostan, is considered as bounded and enriched by the Kistna, and its tributary streams. The Kistna, a sacred river, rises at Balisur in the chain of Sukhien, not far to the south of Prona, and forms a delta near Masulipatam, after a comparative course of about 500 hundred miles. This river rivals any Indian stream in the fertility diffused by its inundations; and the richest diamond mines in the world are in the neighboring hills to the north. The chief tributary streams in that quarter are the Bee-ma; passing near the diamond mines of Visiapour, and the Musi, or Moussi by those of Golconda. But the most considerable river joins the Kistna from the south, being the Toombuddra of Rennell's last map, the Tunge-badra of D'Anville; on the banks of which have been recently discovered many populous provinces, and flourishing towns.

To the south of the Kistna appear the Pennar, the Paliar, and above all the Caveri, another large and sacred stream, which passes by Seringapatam the capital of Mysore, and forms a wider delta than any other southern river, when it enters the sea after a course of about three hundred miles. The Caveri in general pervades a country in which public monuments, unequivocal marks of civilization and opulence, are more common than in the northern parts of Hindostan.* As the course of the Caveri is comparatively short, its tributary streams are unimportant.

Lakes.] The lakes seem to be few. Rennell mentions that of Colair, during the inundations about forty or fifty miles in extent, and a considerable piece of water in all seasons, lying about midway between the Godaveri and Kistna, in the new soil gradually formed by the inundations of these rivers, about twelve miles north of Masulipatam. That of Chilka bounds the British Sircars on the N. being a kind of a salt creek communicating with the sea. The lake of Pulicat is of a similar kind. One or two lakes may also be traced in the vicinity of the Ganges and the Indus. The country of Cashmir is supposed to have been originally a large lake, as reported in the native traditions; and a considerable expanse of water still remains in the northern part of this delightful country, called the lake of Ouller or Tal, being about fifty-three British miles in circuit.

Mountains.] The mountains chiefly celebrated by the Hindoos may be said to be only visible from their country, being the northern chain of the Tibetan Alps, covered with perpetual snow. Hence they are called Himmala from a word denoting snow. This name may perhaps be the source of the Imaus of the ancients. Ptolemy not only describes an Imaus as running north and south, or the Belur Tag of the Russians and Tartars, with its ridges to the west, now called Argun, Ak Tau, &c. but another Imaus passing E. and W. to the N. of Hindostan.

As the northern Imaus of Ptolemy is clearly the Belur Tag, so his southern Imaus may be safely regarded as the Himmala of the

* Rennell, 275.

Hindoos, which may be admitted to have been known to the ancients, who were no strangers to the rich Gangetic regions of Hindostan.

It must be observed however that there is no small confusion, even in the most recent delineations, of the Indian ranges of mountains, or rather hills, and their exact denominations. The ridges to the south of Nepaul and Bootan are far inferior in height to the Himmala, or snowy ridge; nor can we much depend on the Tibetan names given by Du Halde. An equal defect attends the mountains from Sirinagur to Cashmir. The ridge of Kuttore is properly on the north of that province, running east and west: and is followed by the Hindoo Koh of oriental geographers.

The mountains to the west of the Indus, or on the Persian frontier, seem to be the Becius and Parvetius of Ptolemy; but the modern names are little known.

In Major Rennell's excellent map of Hindostan the ridges are rather inserted in the minute and antiquated manner of D'Anville, than treated with a bold and scientific discrimination.

The Gaus, are ranges which run along the western and eastern coasts of the Deccan. The former is by the natives called the mountains of Sukkien.*

The chains of mountains rise abruptly on each side, but particularly the west, forming as it were enormous walls, supporting a high terrace or table land in the middle. This elevated tract, passing through a great part of the Maratta territories to the north of Mysore, is termed in general the Balla Gaut, through its whole extent, while low passes are called Payen Gaut.† Opposite to Paniany, on the western coast, there is a break or interruption of the mountains, about sixteen miles in breadth, chiefly occupied by a forest; exclusive of this gap the mountains of Sukhien extend from Cape Comorin to Surat, at the distance of from forty to seventy miles from the shore.‡ Their effect on the seasons has been already mentioned; and it ceases at Surat, where the S. W. wind carries uninterrupted moisture over Hindostan. The high terrace in the middle of the Deccan receives little rain; and the coast of Coromandel, which receives its rain from the N. E. monsoon, is also of a dry soil, as already described.

The sandy desert on the east of the Indus must not be omitted, extending in length between four and five hundred miles, and in breadth from sixty to a hundred and fifty. Of this great desert the accounts are imperfect; but it is styled that of Agimere, and seems to have been known to Herodotus. Such wide expanses of barren sand form features peculiar to Asia and Africa.

Forests.] Of this extensive portion of Asia a great part remaining in primitive wildness, there are large forests in various quarters, particularly near the mouth of the Ganges, and in the wide unexplored regions on the west of the Sircars. These forests

* As. Res. v. 1. 5.

† Rennell, cxxvii.

‡ Rennell, 276, and his map of the Deccan 1800, in which the southern mountains are well expressed.

surpass in exuberance of vegetation any idea which Europeans can imagine ; creeping plants of prodigious size and length, extended from tree to tree, forming an impenetrable gloom, and a barrier, as it were, sacred to the first mysteries of nature.

Botany.] The general observations which were made on India beyond the Ganges, apply with still greater propriety to the botany of Hindostan. A more fertile soil, and a climate better adapted to the most profuse luxuriance of vegetation than the well-watered tracts in this vast peninsula, cannot possibly be found in any part of the known world. The liberality with which nature has scattered over this favored country the choicest of those plants that contribute to the sustenance, the convenience, and elegance of human life, is boundless, and almost without competition : double harvests, two crops of fruit from many of the trees, and from most of the rest a copious and regular supply during the greater part of the year, are the bases that support its swarming population, while its timber of every quality, its plants of medicinal virtue, its numerous and exquisite dyeing drugs, and its cottons and other vegetable articles of clothing, offer to its inhabitants the materials of enjoyment and civilization.

The most distinguished feature in tropical landscapes is the multitude of lofty trees of the palm kind ; all these rise with a simple trunk to a considerable height, terminated by a tuft of large leaves, and wholly destitute of branches except while they are in fruit : of these many species are natives of India. The cocoa nut tree, perhaps the most widely diffused of any, is found in abundance on the coasts of Malabar and Coromandel ; its fruit supplies an agreeable nutriment, and the fibrous covering of the nut is manufactured into the most elastic cables that are known. The areca palm is another of this family, of rare occurrence in a truly wild state, but cultivated over all India for its nuts, which, mixed with the leaves of the betel pepper and a little quick-lime, are in general request for chewing as tobacco is used in Europe. The smaller fan-palm (*borassus flabelliformis*) is distinguished for its broad fan-shaped leaves, which are used for writing on and for thatching : its wood is in high esteem for rafters ; and of its juice the best palm toddy, the common distilled spirit of the country, is made. This, although a large tree, is far inferior to the greater fan-palm (*corypha umbraculifera*) which abounds on the lower mountains of the Carnatic ; each leaf of this vast tree is capable of covering ten or a dozen men, and two or three of them are sufficient to roof a cottage. The most beautiful of all, the sago palm, is also found here, though not so plentifully as in some of the Indian islands. Besides these may be mentioned the elate *sylvestris*, whose sweet mealy fruit is the favorite repast of the elephant ; and the plantain, distinguished by its tuft of broad, simple, light, green leaves, and its wholesome farinaceous fruit.

Of the other fruit bearing trees the number is so great, and they are for the most part so little known, even by name, to Europeans, that only a few of the principal need be here mentioned : these are, the papaw fig ; two species of the genus known to bot-

anists by the name of eugenia, and remarkable for the sweetness and rose flavor of their fruit ; and the spondius dulcis, whose sweetness, pleasantly tempered with acid, renders it peculiarly agreeable in this hot climate. The pillow is a tree of equal singularity and use : from its trunk and larger branches are produced fibrous bags, sometimes of the weight of 25 pounds, which are filled with nuts like the chestnut, and resembling the almond in flavor. The dillenia indica is remarkable for its beauty, and valuable for its large pomaceous fruit of a pure acid, and equal to the white lily in fragrance. The averrhoa carambola produces three crops of fruit in the year, and another of the same genus, the a. bilimbi, is in a manner covered with large juicy berries of the size of a hen's egg, and resembling the grape. The mango however is reckoned the most exquisite of the Indian fruits, and is found in considerable abundance, both wild and cultivated through the whole peninsula, nor ought the elephant apple, (*feronia elephantum*,) to be omitted, almost equally a favorite with the animal whose name it bears, and with the native Hindoos.

Of the trees whose produce is used in medicine or the arts, the most worthy of notice are the cassia fistula ; the tamarind ; the gambogia, from whose bark exudes the gum of the same name ; the laurus cassia, whose bark is a common substitute for cinnamon ; cæsalpina sappan, a red wood used in dyeing ; sandal wood ; strychnos potatorum, the fruit of which, called the *clearing nut*, is in general use for clearing muddy water ; and semecarpus anarcardium, or marking nut used for giving a durable black stain to cotton. The chief timber trees are the teak, used especially for ship-building ; a large tree called by botanists gyrocarpus, whose strong light wood is in great request for rafts, or catamarans ; the ebony ; the ferreola, the hardest of all the Indian woods ; and the dalbergia, a dark grey wood with light colored veins, very heavy, and capable of a most exquisite polish ; it is much used for furniture.

A few other trees require notice from their size or beauty, such as the banyan tree and Indian fig ; the hibiscus ficutneus is remarkable by its magnitude, and the profusion of its elegant blossoms, and is of peculiar value in a tropical climate, as hardly any insects are found under its shade. The cotton tree rises with a thorny trunk eighteen feet in circumference to the height of fifty feet without a branch, it then throws out numerous boughs, which are adorned in the rainy season with purple blossoms as large as the open hand, and these are succeeded by capsules filled with a fine kind of cotton. The shrubs and herbaceous plants are innumerable, and multitudes would be well worth recording for their beauty or use, if the nature of this work allowed an opportunity ; we cannot however omit the indigo and the Indian madder, whence the beautiful colors of the Indian chintzes are procured. The nyctanthes hirsuta, and the jasminum grandiflorum, boast the most fragrant blossoms of the whole east, the former perfuming the night, and the latter scenting the day. The gloriosa superba, cecropgia candelabrum, and Indian vine, form by their

union bowers worthy of Paradise ; and the *butea superba*, a small tree, by the striking contrast of its green leaves, its black flower-stalks, and its large scarlet papilionaceous blossoms, attracts with its ostentatious charms the notice and admiration of the most incurious.

Zoology.] For an ample account of the zoology of Hindostan, the curious reader may consult Mr. Pennant's view of this country, this being the peculiar province of that great naturalist. The numerous cavalry, which form the armies of the Hindoo princes, suppose great numbers of horses ; and the breeds most celebrated are those of Lahore and Turkistan, but the grandees are supplied from Persia and Arabia. The inferior breeds though ugly, are active, and in some regions there are poneys not exceeding thirty inches in height.* The horses of Tibet, generally pyed, are often used in Gangetic Hindostan. The animal called the wild mule, and the wild ass, sometimes pass in herds to the northern mountains, from the centre of Asia and the desert of Cobi.

The cattle of Hindostan are numerous, and often of a large size, with a hunch on the shoulders. The sheep are covered with hair instead of wool, except in the most northern parts.

Antelopes abound, of various beautiful kinds, particularly that called the Nilgau, which is of a considerable size. Bernier, the most intelligent of travellers in India, gives an account of the chase of the antelopes by means of the hunting leopard, trained as in Persia to this sport.†

The Arabian camel, or that with a single hunch, is not unfrequent about Patna. The elephant has been frequently described ; the usual height of this intelligent animal is about ten feet. Apes and monkeys abound in various regions of Hindostan ; and the orang outang is said to be found in the vast forests on the W. of the Sircars. The dogs are generally of the cur kind, with sharp erect ears and pointed noses : the smallest size is that kept by the Pariars, or degraded poor, rendered doubly miserable by the fanatic prejudices of the abominable system of the Bramins. The other animals are wild boars, bears, wolves, foxes, jackals, hyenas, leopards, panthers, lynxes : in the north, musk weasels, and many other quadrupeds of inferior size.

The lion seems to have been always unknown in Hindostan, where the ancient sculptors have attempted in vain to represent an animal which they never saw ; but Mr. Pennant assures us that they are found near the celebrated fort of Gwalior, about Marwah, and near Cashmir. The royal tiger of Bengal is however a far more terrible animal than the stoutest lion, and was known in classical times, as Seneca the poet calls it *Gangetica tigris*, or the Gangetic tiger. Such is their size and strength that they are said to carry off bullocks, the height of some being said to be five feet, and the length in proportion. Parties of pleasure on the isles at the mouth of the Ganges have often been shockingly inter-

* Pennant, vol. ii. 239.

† Those of Tippoo are in the Tower of London ; their legs are much higher in proportion than those of any other seline animal.

rupted by the sudden appearance of the tiger, prepared for his fatal spring, which is said to extend a hundred feet, not improbable when compared with that of the cat. Such is the nature of the animal, that if disappointed in this first leap, he couches his tail and retreats. The rhinoceros with one horn, an animal of the swamps, also abounds in the Gangetic isles. Wild peacocks abound in Tibet and Ceylon; our common fowl are also found wild in the jungles, whence they are called jungle fowl. Hence it seems reasonable to conclude, that as these animals have been diffused over the civilized world from time immemorial, they must have passed from Hindostan to Persia, whence they were distributed to the western countries.

Mineralogy.] The mineralogy of Hindostan may be opened by its most distinguished and peculiar product, celebrated in all ages of the world, that of diamonds, which are indeed also found in Brazil, but of far inferior quality. This substance is the most hard, transparent, and brilliant of all minerals; and is commonly colourless, but is found occasionally of a citron yellow, grey, brown, or black. It is found in beds of torrents, or in yellow ferruginous earth, under rocks of quartz or sand stone.

The chief and most celebrated diamond mines are those near Visiapour and Golconda, both near streams that flow into the Kistna in the southern division of Hindostan, Golconda being in the territory of the Nizam, while Visiapour belongs to the Marattas.*

Raoconda, a famous diamond mine in the territory of Visiapour, about forty British miles N. W. from the junction of the Beema and Kistna, seems to be the most noted of those in that quarter.† A district on the river Mahanada, to the S. of Sumboulpour, is also celebrated for this rich product; as is Gandicotta, on the southern bank of the river Pennar.‡

The mine near the Mahanada is not the sole example of the diamond being found to the north of the Deccan, for this mineral unexpectedly occurs so far north as Penna, in the territory of Bundercund, about sixty miles south of the river Jumna, which flows into the Ganges.§

Next in value to the diamond are the sapphire and the ruby, which are chiefly found in the Birman territories; but the ruby also occurs in Ceylon, which likewise produces an inferior kind of sapphire, the topaz, and other precious stones.

Among the metals gold is found in the rivers, which flow from Tibet into the Ganges and Indus; but no gold mines seem ever to have been known in Hindostan, which has rather been celebrated for attracting this metal in commerce from other countries. On the other hand Tibet, a mountainous country, abounds in this precious metal. Silver seems rare in general throughout the oriental regions, and there is no indication of this mineral throughout all India. Thunberg mentions iron ore and plumbago among the minerals of Ceylon; but says nothing of copper, which seem also little known in Hindostan.

* Colore, another diamond mine, is on the southern bank of the Kistna, not far from Condavir. Rennell, 290.

† Rennell, 253.

‡ Ib. 240.

§ Ib. 233.

Mineral Waters.] The natives sometimes seek for the cure of diseases by bathing in the sacred streams ; and their devotion to water in general seems to prevent their exploring any medicinal sources. Yet there are a few exceptions, and several warm springs are reputed sacred.

Natural Curiosities.] Among the singular features of nature may be mentioned the appearance of the provinces on the rivers, during the season of inundation, when an access is opened by numerous channels to places before inland. The grand aspect of the northern mountains covered with snow, and the wide desert on the east of the Indus, are also grand features ; as is the high table land of Mysore, supported by natural buttresses of mountains. The Sunderbunds, and prodigious forests, have been already mentioned. The detached ridges of rock, sometimes crowned with strong fortresses, may also be named among the natural curiosities. But one of the most noted in the Hindoo tradition is the Gangoutra, or fall of the Ganges, sometimes called the Cow's Mouth. According to the report of a Bramin, who pretended to have visited the spot, the Ganges springs from the peak of Cailasa, seven days journey to the south of Ladac, or Latac, the capital of a small Tibetan principality.* This peak is about two miles to the south of Mansaror ; and the river thence flows, for about seven or eight miles, when it finds a subterranean passage, until it again emerges in the country of Kedar Nauth, at the place called Gungowtry.

Adam's bridge is also a noted fable of the Bramins, for in their strong imaginations and weak judgments every thing assumes a fabulous tinge. It is a kind of sand bank, with some isles stretching from a promontory to the opposite isle of Ceylon ; but the name of Rama has been exchanged by the Mahometans, for that of Adam.

CHAPTER II.

GANGETIC HINDOSTAN, OR THE COUNTRIES ON THE GANGES.

EXTENT AND DIVISIONS, BRITISH POSSESSIONS, REVENUE, GOVERNMENT, COLLEGE, ARMY, NAVY, CITIES AND TOWNS, SURROUNDING STATES.

Extent and Divisions.] THIS grand division of Hindostan extends from the eastern boundaries of Bengal, to the country of Sirhind, a length of about 1000 miles. The greatest breadth, from the sources of the Chumbul to the mountains of Sewalik, is about 450 ; and the least, on the west of the province of Bengal, about 230 miles. It comprises the provinces of Bengal, Bahar, Allahabad, Oude, Agra, with part of Delhi and Agimere, and of Malwa in the south ; most of them equal in celebrity to any in Hindostan, and the chosen seats of the power of the Monguls, as well as of mighty kingdoms, even in classical times.

* As. Res. v. 45, vi. 102.

British Posessions.] Bengal, Bahar, with Benares, and some other districts to the west, forming the chief basis and centre of English power in this country, it is proper first to consider them apart, and then proceed to some account of the other provinces. The British settlements here extend about 550 miles in length by 300 in breadth, in themselves a powerful kingdom. The native population is computed at ten or eleven millions of black subjects, exclusive of the English, whose number seems not authenticated.

Revenue.] The revenue of these British provinces is computed at 4,210,000l. sterling ; the expense of collection, military and civil charges, &c., 2,540,000l. ; so that the clear revenue is 1,670,000l.* They are well situated in respect to security from foreign invasion ; and since they were in posession of the British have enjoyed more tranquility than any part of Hindostan has known since the reign of Aurungzeb.

Government.] The government of Bengal and its wide dependencies, was first vested in a governor general and a supreme council, consisting of a president and eleven counsellors : but in 1773 these were restricted to four, with Warren Hastings the governor general, who were to direct all affairs, civil and military, in the kingdoms of Bengal, Bahar, and Orissa ; and to controul the inferior governments of Madras on the E. and Bombay on the W. with Bencoolen in the island of Sumatra.† The court of judicature consists of a chief justice and three other judges, with civil, criminal, naval, and ecclesiastical jurisdiction. The Hindoos are governed by their own laws ; but it is to be wished that in these and the other British possessions the abominable influence of the Bramins were extinguished, and the casts totally abolished, as the most shocking obstacle to all the best feelings and exertions of human nature, that ever was imposed by crafty superstition upon consummate ignorance.

College.] The College of Fort William, at Calcutta, in Bengal, was founded on the fourth of May 1800. During the seven first years of its establishment it produced nearly one hundred volumes in Oriental literature. This College, after encountering several difficulties, is now in a flourishing condition, and has received the sanction and patronage of the East-India Company. The benefit of this institution consists principally in diffusing a knowledge of the Scriptures over the East. There is a department for the translation of the Bible into the Oriental languages, And a commencement had been made, in 1805, in five languages.‡

Army.] The military establishment in Bengal is always respectable, but varies according to the situation of affairs. The British troops are supported by the Sepoys, a native militia, who are accustomed to have numerous idle followers, so that the effective men seldom constitute more than a quarter of the nominal army. A force of 20,000 British soldiers might probably encounter and vanquish 200,000 blacks or Hindoos. The decisive battle of Plassey, which secured to the British the possession of these opulent

* Pennant, ii. 327.

† Rennell, cxiv.

‡ Buchanan's Researches.

provinces, was gained by the formidable array of nine hundred Europeans.*

Cities and Towns.] The chief city of Bengal, and of all the British possessions in Hindostan, is Calcutta. The latitude is 22° 33' north, and the longitude 88° 28' east from Greenwich.

"Generally speaking, the description of one Indian city is a description of all; they being all built on one plan, with exceedingly narrow, confined, and crooked streets; with an incredible number of reservoirs and ponds, and a great many gardens, interspersed. A few of the streets are paved with brick. The houses are variously built, some of brick, others with mud, and a still greater proportion with bamboos and mats: and these different kinds of fabrics, standing intermixed with each other, form a motley appearance: those of the latter kind are invariably of one story, and covered with thatch. Those of brick seldom exceed two floors, and have flat terraced roofs. The two former classes far outnumber the last, which are often so thinly scattered, that fires, which often happen, do not sometimes meet with the obstruction of a brick house through a whole street."

"Calcutta is, in part, an exception to this rule of building; for there the quarter inhabited by the English is composed entirely of brick buildings, many of which have more the appearance of palaces, than of private houses; but the remainder of the city, and by much the greatest part, is built as above described. Calcutta is the emporium of Bengal, and the seat of the Governor General of India. It is a very extensive and populous city, being supposed at present to contain at least 500,000 inhabitants. Calcutta is situated on the western arm of the Ganges, about 100 miles from the sea; and the river is navigable up to the town for the largest ships that visit India. It is a modern city, having risen on the site of the village of Govindpour, about ninety years ago. The citadel is superior in every point, as to strength and correctness of design, to any fortress in India; but on too extensive a scale to answer the useful purpose intended, that of holding a post in case of extremity.†"

In this grand capital of British Asia, the mixture of people and manners presents a picturesque and interesting scene. The black Hindoo, the olive-coloured Moor or Mahometan, contrasted with the fair and florid countenances of the English; and the charms of the European damsel receive a foil from the dark Hindoo beauties. The luxuries of the Asiatic are added to the elegance and science of the English life. Even the newspapers are drawn up with care, and printed with elegance; and the Asiatic society, instituted by the late excellent Sir William Jones, forms a noble monument of science in a distant country.

The commerce of Calcutta is very great in salt, sugar, opium, silks, and muslins, &c. The poppy which yields the opium is particularly cultivated in the province of Bahar. On the Ganges are transported to Asam cargoes of salt, in exchange for gold, sil-

* Rennell, xciv

† Rennell, 58, 59.

ver, ivory, musk, and a particular kind of silky cotton. The cowry shells, used as a small coin, are imported from the Maldives in exchange for rice. The fine muslins are chiefly fabricated in the rainy season from May to September, and, with calicoes, form a great part of the exports to Europe.

In the eastern part of the British possessions the most considerable town is Dacca, beyond the principal stream of the Ganges, but defended on the east by the Megna or Burrampoot. Dacca is celebrated for manufactures of the most delicate muslins, so much in request in the European market, and which are made from the cotton of the district. It was once the capital of Bengal, and was succeeded by Moorshedabad, a modern city. Hoogley, or Ugli, is a small but ancient city, about 26 miles above Calcutta, on the grand western branch of the Ganges, which thence receives its name.

Patna is the capital of the province of Bahar, situated about 400 miles N. W. from Calcutta, being tolerably fortified, and a place of considerable trade ; most of the saltpetre in particular, exported to England, is made in the province of Bahar.

Benares approaches to the western frontier of the British possessions, the district having been ceded to the East India Company in the year 1755. It is a rich, populous, and compact city, on the northern bank of the Ganges, about 460 miles from Calcutta. Benares, anciently called Kasi, was the most early seat of Braminical knowledge in the north.

On leaving the British possessions, and proceeding towards the west, first occurs Allahabad, in the province so called, at the confluence of the Jumna and the Ganges, a city belonging to the nabob of Oude, but of little consequence. Not far to the S. W. of Allahabad, are the diamond mines of Penna, in the small detached province of Bundelcund.

Lucknow is the present capital of Oude, having superseded Fyzabad, a city on the Gogra, near the ancient city of Aiudh, which seems to have given name to the province. At a considerable distance to the N. W. is Borilli, a small, but noted town, near the northern frontier.

The great and good emperor Acbar constituted Agra, the capital of the Mogul empire, about A. D. 1566. It was then a small fortified town, but it soon became an extensive and magnificent city, and has as rapidly declined.

To the N. W. of Agra, near the confines of Sindetic Hindostan, stands the celebrated city of Delhi, the Mahometan capital of India, said to be of considerable antiquity, by the name of Indarput. That intelligent traveller, Bernier, computes the extent of Delhi, in 1663, at three leagues, exclusive of the fortifications ; and he represents Agra as of wider circuit. This metropolis may be said to be now in ruins ; but there are many noble and splendid remains of palaces, with baths of marble.* The grand mosque is a magnificent edifice, of marble and red free-stone, with high min-

* As. Res. iv. 417.

arets, and domes richly gilt. One of the quarters of the city has been very thinly inhabited since the dreadful massacre by Nadir Shah, in which one hundred thousand people are said to have perished.

The city of Agimere, or Ajimer, may be more properly allotted, with the greater part of that province, to Sindetic Hindostan : but Oujein may be considered as the farthest city in the south of that portion now under view. Oujein is about six miles in circumference, surrounded by a strong wall, with round towers. The houses, partly brick, partly wood, covered with lime, tarass, or tiles : the bazar, or market, is spacious, and paved with stone : there are four mosques, and several Hindoo temples, with a new palace built by Sindia. On the south runs the river Sippara, which here suddenly turns north, pursuing its course into the Chumbul, the last a large river, not less than three quarters of a mile in breadth, at some distance from its egress into the Jumna.*

Turning to the east, the river Nerbudda may for a part be considered as the most southern limit of Gangetic Hindostan ; yet concerning Gurrah, a city or town of some note, there are no details ; and the other names are too unimportant for general geography. But the noted fort of Gwalior must not be omitted, being a striking object in Hindoo topography. The insulated rock on which it stands, is about four miles in length, but narrow : the sides are almost perpendicular, from two to three hundred feet above the surrounding plain.† On the top there is a town, with wells and reservoirs, and some cultivated land. This celebrated fortress, which is about 80 miles to the south of Agra, was taken by surprise by a few English, under Major Popham, in 1779. Such isolated forts on rocks, were not uncommon in ancient India ; and that of Aornos is distinguished in the history of Alexander.

Surrounding States.] Before closing this brief delineation of Gangetic Hindostan, the most large, celebrated, and best known quarter of that extensive region, it may be proper to offer some remarks on the surrounding states on the E. and N. The Roshawn of Rennell is the same with Aracan, being merely a Hindoo term for that country. His Cossay is only another name for Meckley, or the country of the Muggaloos, a people between Asam on the north, and Aracan on the south, whose chief town is Munipura.‡ These eastern tribes of rude mountaineers are little known, but approach to the savage state. Asam has been already briefly described in the account of the river of Burrampoot ; but to the west open the wide and obscure regions of Tibet.

Of Sirinagur, laid down in the maps as the most northern frontier country, an interesting account has recently appeared.§ To the north is seen the lofty chain of snowy mountains, passing in an extensive line from east to west at the distance of about 80 miles to the N. of the town of Sirinagur.

* As. Res. vi. 40.

† As. Res. v. 228, and 230.

‡ Hodges, 139.

§ As. Res. vi. 509.

One of the most conspicuous summits is that of Hem, rising in four or five conical peaks ; and near its base is a place of Hindoo worship, called Buddrinaut. Several rivulets descend into the Aliknundra, here acknowledged by the Hindoos as the genuine and divine Ganges. The raja and natives are of the Hindoo faith ; but the country, a mass of mountains, extremely poor. The channel of the river is here not less than 250 yards in breadth. The sands are washed for gold ; and about forty miles to the north of the town are two copper mines, with one of lead, about fifty miles to the east.

CHAPTER II.

SINDEtic HINDOSTAN; OR THE COUNTRIES ON THE RIVER SIN-DEH, OR INDUS.

EXTENT, WESTERN BOUNDARY OF HINDOSTAN, CHIEF CITIES AND TOWNS.

Extent.] THIS part extends from the northern mountains of Cashmir, and the Hindoo Koh, in the north of Cabul, to the mouth of the Indus, a length of about 900 miles, and about 350 in medial breadth. Besides part of the provinces of Delhi and Agimer, it contains the extensive province of Moultan, with Lahore, Cashmir, Cabul, the frontier region of Candahar, and that of Sind, at the mouth of the Indus. These provinces are the most remote from the seat of British power, and, the greater part of modern travellers having visited Hindostan by sea, they are less accurately known than any other quarter.

The chief cities which occur in this extensive region, are Lahore, Cashmir, Cabul, Ghisni, or Gasna, Candahar, Moultan, and Tatta, in the Sindean Delta. On the east of the Indus, or in Panjab, the Seiks, a new religious sect, form the leading power ; while on the west, and even as far as Cashmir, the dominions of a Persian Shah, whose seat of empire is at Candahar, comprise all the provinces, with several in the east of Persia, and to him even Sind is tributary.

This brief account of Sindetic Hindostan shall begin with the N. E. and end with the S. W. after mentioning that Agimer, which may be regarded as the most eastern city of this division, is little remarkable, except for a strong fortress on a hill.

Chief Cities and Towns.] The town of Sirhind is placed by modern maps on the river Caggar, which D'Anville bends west into the Indus, but Major Rennell supposes it to follow a detached course into the gulf of Cutch : perhaps it may be lost in the great sandy desert.

Lahore, now the capital of the Seiks, was the residence of the first Mahometan conquerors before they advanced to the more central parts ; and, including the suburbs, was supposed to be

three leagues in length. From Lahore to Agra, near 500 English miles, there was an avenue of shady trees.* The river Rauvee passes by Lahore, being the Reva of the Hindoos, said by them to derive its source from the mountain Vindhia, as the Sarjou from the Himar, or Himala.†

Nearly north from Lahore, at the supposed distance of about 200 miles, stands Cashmir, the capital of the delightful province, so called. This city is said to be also called Sirinagur, having been confounded with the town of the same name, already mentioned in the account of Gangetic Hindostan. To avoid the confusion arising from identity of names, it is better to follow the authorities of Bernier and Forster, who denominate the capital of Cashmir by the same term as the country. "The city, which in the ancient annals of India was known by the name of Siringnaghur, but now by that of the province at large, extends about three miles on each side of the river Jalum, over which are four or five wooden bridges, and occupies in some part of its breadth, which is irregular, about two miles. The houses, many of them two and three stories high, are slightly built of brick and mortar, with a large intermixture of timber. On a standing roof of wood is laid a covering of fine earth, which shelters the building from the great quantity of snow that falls in the winter season. This fence communicates an equal warmth, in winter as a refreshing coolness in the summer season, when the tops of the houses, which are planted with a variety of flowers, exhibit at a distance the spacious view of a beautifully checkered parterre. The streets are narrow, and choaked with the filth of the inhabitants, who are proverbially unclean. No buildings are seen in this city worthy of remark; though the Kasmirians boast much of a wooden mosque, called the Jumah Mussid, erected by one of the emperors of Hindostan; but its claim to distinction is very moderate."‡ The country of Cashmir is a delicious vale, extending in an oval form, about 90 miles from S. E. to N. W. It was subject to the Zagathai princes (a Tartaric race, who speak the same language with the Turks,) till A. D. 1586, when it became subject to the Monguls, and afterwards to the Afghans. Rice is the common product of the plains: while the surrounding hills yield wheat, barley, and other crops. The celebrated shawls are only manufactured here; the material being from Tibet, especially those districts which lie at a month's journey to the north-east. The price, at the loom, is from 26s. to 5l. and the revenue is transmitted to the Afghan capital in this fabric. The Cashmirians are stout and well formed, but their features often coarse and broad, even those of the women, who in this northern part of India are of a deeper brown complexion than those of southern France or Spain. The dress is inelegant, but the people gay and lively, and fond of parties of pleasure, on their delicious lake. The Afghan government has, however, somewhat crushed their spirit. The language is de-

* Rennell, 82; but others only extend it to Delhi.
† Wesdin, 232.
‡ Forster, vol. ii.

gived from the Sanscrit, but the Persian is chiefly used in elegant composition. During the summer heats, the great Moguls used to retire to Cashmir, where they enjoy a cool and refreshing climate.

The wide space from Cashmir to Cabul, is more remarkable for numerous streams and mountains than any other circumstance; and the conquerors of India preferred the south. Even in Cabul the mountains are said to be covered with perpetual snow; but the country is diversified with gentle hills, fertile vales, and stately forests. It is also intersected by many streams, and besides delicate fruits and flowers, is abundant in other productions. Ghizni was the ancient capital of the country, of which Candahar was then reckoned a part.* The city of Cabul is the capital of the dominions of the Persian Shah, usually styled king of Candahar, whose dominions extend westward beyond the sea of Durrah, including a great part of Corasan, with the large Persian province of Segistan, being about 800 miles in length by about half that breadth. Cabul is esteemed a considerable city, in a romantic and healthy situation.

Ghizni, or Gasna, is remarkable as the seat of the first Mahometan conquerors of Hindostan, whose empire almost corresponds with the modern kingdom of Candahar.

The city which gives name to the last is of small account, except as a noted pass from Persia into Hindostan.

Having thus reached the most western frontier, and nothing farther worthy of observation arising on that side of the Sindeh, it will be proper to pursue the course of that grand stream towards the south. The small city and fortress of Attock were built by Acbar, 1581; but the vicinity was memorable in ancient times as the general passage from India to the west. The Indus, about twenty miles above Attock, is a rough, rapid stream, about a mile in breadth, where not interrupted by isles. This size indicates a remote source, and many tributary streams.

Moultan, the capital of the province, so called, is about 170 miles to the south of Attock, on the large river Chunab, not far from its junction with the Indus, along which there is an uninterrupted navigation for vessels of 200 tons, not only to this city, but as far as Lahore.† Moultan is a small city, and of little consequence, except for its antiquity and cotton manufacture.

The last remarkable city on the Indus is Tatta, the capital of the province of Sindi, and situated within the Delta, the upper part of which is well cultivated, while the lower, instead of the lofty forests of the Gangetic Sunderbunds, presents only low brushwood, swamps, and lakes. In the months of July, August, and September, when the S. W. monsoon brings rain in most parts of India, the atmosphere is here often clouded, but no rain falls except near the sea. At Tatta the heats are so violent, and the winds from the sandy deserts on the E. and N. W. so perni-

* Rennell, 152.

† Ib. 178; yet, page 93, he mentions the river of Moultan as being choked up about 1665.

cious, that many precautions are used. The manufactures of this city in silk, wool from Kerman, and cotton, have greatly declined. The Mahometan prince of Sindi is tributary to Candahar.

CHAPTER IV.

CENTRAL HINDOSTAN, OR THE MIDDLE PROVINCES..

BOUNDARIES, CHIEF CITIES, SIRCARS, ANCIENT TRADE, PIRATES.

Boundaries.] THIS division is chiefly bounded by Gangetic Hindostan on the north, and on the west by the sandy desert and the ocean. The southern limit is the river Kistna, with its tributary stream the Beema, while the E. is washed by the bay of Bengal. The length from E. to W. from Jigat point to Cape Palmiras, is little less than 1200 miles ; while the medial breadth is about 400. In it are comprehended the province of Orissa, with part of Golconda, Berar, Dowlatabad, Candeish, and Guzerat, and other districts of inferior name ; and on the eastern shore are the British provinces of the Sircars.

Chief Cities.] In a natural transition from the division of India last described, the province of Guzerat first presents itself, like a large promontory, but the shores seem little adapted to commercial purposes. The chief city, Amedabad, is considerable, and well fortified, taken by the English under General Goddard in 1780, restored to the Marattas in 1783. Cambay, at the distance of more than 50 miles, may be called the sea port of this capital ; itself a handsome city, formerly of great trade in spice, ivory, silk, and cotton cloths ; but the harbor was impeded with sand and mud, and is now little frequented, the trade being chiefly transferred to Surat. The sovereigns of Guzerat were formerly powerful, and long withstood the power of the Monguls.

Surat was formerly more celebrated as the port whence the Mahometans of India embarked on their pilgrimage to Mecca, than for any other circumstance, though reported to have been an important city in ancient times. The Portuguese seized Surat soon after their arrival in Hindostan ; and it was among the first places in this country frequented by the English.*

Bombay, at a considerable distance to the south, is a well known English settlement, on a small island about seven miles in length, containing a very strong, capacious fortress, a large city, a dock yard, and a marine arsenal.† It was ceded to the English in 1662 by the Portuguese, as part of the dower of the queen of Charles II.

* For a recent account of Surat see Stavorinus, vol. ii. p. 479. The inhabitants are said to be 500,000, a considerable part of whom are Moors, that is Arabs, Persians, Monguls, Turks, professing Mahometanism, but retaining some Pagan rites.

† Ittenel, 31.; the name in Portuguese, *Buon bahia*, a good bay.

In the same sound, or small bay, are the isles of Salsette and Elephanta, in which are subterraneous temples.

Juggernaut in the province of Orissa, is noted for being the seat of a famous idol of the Hindoos. At the celebration of the annual festival the multitude collected at this spot is immense. The natives when speaking of the number say, that 100,000 would not be missed. The pilgrims are from all parts of India, of all characters and all ages. Multitudes perish on their journey, and for the distance of 50 miles from Juggernaut the ground is strewed with human bones and skulls. The fatigue of long journeys in the hottest season of the year, together with extreme famine, but above all the immense number of voluntary human sacrifices, has occasioned so large a collection of dead bodies, that the vultures, dogs and jackalls, seem to live on human prey. The vicinity of Juggernaut to the sea probably prevents the contagion, which otherwise would be produced by the putrefactions of the place.*

On leaving the shore and proceeding towards the east of central Hindostan, first occurs the city of Burhampour, of small note. Ellichpour is of considerable importance, being the chief city of Berar. Nagpour is the capital of the eastern division of the Maratta empire, as Poona is of the western, being a modern city of small size. At Nagpour, which may be called the central city of Hindostan, the rainy season commences with the S. W. monsoon.

Not far to the east of this city begins that extensive and unexplored wilderness, which is pervaded by the great river Bain or Baun Gonga, and terminates in the mountains bounding the English Sircars.† The acquisition of these provinces has been already mentioned in the first chapter. They present little worthy of notice. Nor does there appear to be any capital city, or chief town, in the Delta of the Godaveri, or throughout the Sircars, the wide tract of forest on the N. W. having prohibited inland trade or intercourse. Masulipatam is indeed a place of some account; but standing on the northern branch of the Kistna, may be arranged in the southern division of Hindostan.

On turning towards the west, few places of note arise, except Aurungabad, a modern city, deriving its name from Aurungzeb, in whose time it was the capital of the Deccan, or parts to the S. of Hindostan proper. It was afterwards the metropolis of the Nizam's territory, till the preference was given to Hyderabad. Near this city is Dowlatabad, which gives name to the province, with a singular fortress on a peaked rock.‡

This central part of Hindostan nearly corresponds with the Decan, or southern countries of the Monguls, who did not pass the Kistna till a recent period; and, instead of using the term in its

* Buchanan.

† See Mr. Blunt's journey, above quoted, for minute details concerning this formerly obscure region. *Asiat. Reg.* ii. 128—200. This important journey appears to have been undertaken solely with geographical views; and it is said that the East India Company entertain the highly laudable intention of publishing an entirely new map of Hindostan.

‡ See the print, *Bernoulli*, i. 480.

just acceptation, applied it to the southern provinces of their empire. Though formerly the seat of great power, and the western coasts greatly frequented by foreign merchants of all nations, the harbors have since been impeded, and the commerce has declined, being now chiefly transferred to the Ganges, which presents such superior advantages as amply compensate for the greater distance of the voyage. The Roman and Arabian fame of the western shores has vanished ; and silence prevails in the streets of Barygaza or Baroach, the port of the great inland city Tagara, whence the products of India, gems, ivory, myrrh, pepper, ginger, and cotton cloths, plain or ornamented with flowers, were, in the time of Arrian, exported to the western world.

In later times the southern part of this coast was remarkable upon another account, being the chosen residence of daring pirates. Yet these freebooters were known even to Pliny and Ptolemy, being stimulated in all ages by the richness of the commerce. They resembled on a small scale the piratical states of Barbary, and a succession of *Angrias* was continued till 1756, when the English seized Gheriah, the principal fortress.

CHAPTER V.

THE SOUTHERN DIVISION OF HINDOSTAN.

BOUNDARIES, BRITISH POSSESSIONS, CHIEF CITIES AND TOWNS.

Boundaries.] THIS part, which may also be called the Deccan or South, in the most proper acceptation of the term, is bounded, as already explained, by the river Kistna, and its most northern subsidiary streams flowing into the Beema. Hence it will extend from the latitude of Bombay, to the southern point of Cape Comorin, about 850 miles in length, and about 350 of medial breadth. It contains nearly the whole of the province of Visiapour, and the most important part of that of Golconda, with the central kingdom of Mysore, the long eastern province of Carnada, or the Carnatic, the principalities of Tanjore, Travancore, and the Samorins of Calicut, the pepper coast of Canara, and other districts, of which Conam is supposed to be the Kamkam, which the Arabian authors mention as adjoining to the territory of the Balhara. In this division of Hindostan may also be included the island of Ceylon, the coasts of which are now possessed by the English, who have supplanted the Dutch ; while the native princes retain the extensive inland parts.

British Possessions.] In addition to the district around Madras, the British power was, in 1792 and 1799, extended over wide provinces in the south and west of Mysore, and Seringapatam, the capital, is also in their possession, so that their territories in this portion of Hindostan only yield in extent and consequence to

those on the Ganges. Seringapatam is not only detached, but is by its inland situation little adapted for a commercial capital ; it may therefore be perhaps expected that Calicut, an ancient and celebrated emporium, or some other place on that coast, will be selected as a metropolitan town of the new acquisitions.

Chief Cities.] In recent times Seringapatam may be regarded as the most important city in this portion of Hindostan. It is situated in an isle, surrounded by the river Caveri, which is even here about five feet deep, and runs over a rocky channel. The length of this isle is about four miles, and the breadth about a mile and a half; the western side being allotted to the fortress, distinguished by regular out-works, magnificent palaces, and lofty mosques ; for Tippoo and his father were Mahometans. The environs were decorated with noble gardens ; and among the means of defence was what is called the *bound hedge*, consisting of every thorny tree or caustic plant of the climate, planted to the breadth of from thirty to fifty feet.

In this central territory the British also possess several considerable towns, Salem and Attore in the E. ; Dindigul, Coimbatore, Pallicaud, on the south ; and on the western coast, Paniany, Ferocabad, Calicut, now nearly deserted, Tellicherri, Mangalore, and the northern British possession of Carwar is within forty miles of the Portuguese settlement of Goa ; while on the S. they approach within a like distance of Cochin. Of these places, Calicut is memorable as the first Indian port visited by the Portuguese under Vasco de Gama, and as the seat of the Zamorins, who at that period appear to have possessed the whole Malabar coast from Goa to Cochin.

The native rajahs of Mysore, a part of whose dominions have been conquered by the British, were princes of some eminence, supplanted by the Mahometan usurpation of Hyder. In the Carnatic the British have long held Madras, where they settled about 1640 ; but the fortress, which is strong, and includes a regular well built city is of modern date. Unhappily there is no port, nor is there indeed one haven for large vessels, from the mouth of the Ganges to Trincomali, on the eastern side of Ceylon, which renders this last of singular benefit to the English commerce. Through this wide extent of fifteen degrees, or more than 1000 miles, the coast forms nearly an uniform line, infested with a dangerous surf, and scarcely accessible except in the flat-bottomed boats of the country. But if found necessary, European industry might certainly form a port at the wide but impeded mouths of the Godaveri, the Kistna, or the Caveri ; and when the British colonies shall have assumed a permanent and steady progress of population, it is probable that such designs may be executed.

Not far from the western frontier of the British settlement at Madras stands Arcot, esteemed the capital of Carnada or the Carnatic. The Nabob* often resides at Madras. In his dominions

* This word, also written *Navab*, implies Lieutenant-governor, or viceroy : but the title became hereditary.

there are several celebrated temples, visited by numerous pilgrims; and in general the southern parts of Hindostan display more numerous edifices, and other marks of civilization, than the northern.

Having thus briefly mentioned the British possessions in this quarter of Hindostan, and their nearest ally, it may be proper to indicate a few other remarkable places to the south of these possessions. Tranquebar is a noted Danish settlement in the kingdom of Tanjore, which embraces the wide Delta of the Caveri. This settlement was formed about 1617, and has been chiefly remarkable on account of the Lutheran missionaries, who resorted hither to convert the Hindoos, and have sometimes contributed to illustrate natural history. Pondicherri was the principal settlement of the French, founded in 1674, and before the war of 1756, was a large and beautiful city.

On the western coast, or that of Malabar, stands Cochin, on the northern point of a long tract of land, forming a kind of island, surrounded on the east by a creek of the sea, which receives several streams. But this seemingly ample harbor is obstructed by a dangerous bar. When the Portuguese first visited Hindostan, Cochin and the surrounding territory were possessed by a native rajah, and the celebrated Vasco de Gama died here 1525. This city remained subject to the Portuguese till 1660, when it was taken by the Dutch. The surrounding creeks and marshes of this low and unhealthy shore abound with fish and game.*

About a mile from the city of Cochin, is a town called Jews'-Town. It is almost wholly inhabited by Jews, who have two respectable synagogues. There are Jews here from remote parts of Asia, so that this is the fountain of intelligence concerning that people in the East. The resident Jews are divided into two classes, called the Jerusalem, or white Jews, and the ancient or black Jews. The white Jews reside at Jews'-Town. The black Jews have a synagogue there, but the great body of that tribe inhabit towns in the interior of the province. The black Jews have been settled here much the longest.†

To the north of the British territories first occurs Goa, formerly a capital settlement of the Portuguese, and a noted seat of their Inquisition. This city, once magnificent, stands on a small isle in the midst of a beautiful bay, which receives a rivulet called the Gonga, and two or three others from the Balagauts, or highest mountains of Suckhien, which form a grand distant prospect, while the intervening scene is variegated with hills, woods, convents, and villas. It was seized by the celebrated Albuquerque, the greatest of the Portuguese commanders in India, A. D. 1513. It afterwards became another Malacca, another centre of Portuguese trade.‡ The harbor is ranked among the first in India, and if in the hands of the English, would probably resume its former consequence.

There is an Old and New Goa on the W. coast of Hindostan.

* Wesdin, 130. gives a good account of Cochin.

† Buchannan.

‡ Pennant, 112.

The old city is about 8 miles up the river Mandova. The Viceroy and chief Portuguese inhabitants reside at New Goa, which is at the mouth of the river, within the forts of the harbor. The old city, where the inquisition and churches are, is now almost entirely deserted by the secular Portuguese, and is inhabited by the priests alone. The unhealthiness of the place, and the ascendancy of the priests, are the causes assigned for abandoning the ancient city. The churches of Old Goa, are remarked for their magnificence. Old Goa is properly a city of churches; and the wealth of provinces appear to have been expended in their execution. The chapel of the palace is built after the plan of St. Peter's at Rome. The cathedral of Goa is worthy of one of the principal cities of Europe. In this place is the noted inquisition, so remarkable for its secret and excessive cruelty towards the enemies of the Romish church. This inquisition was suppressed by Royal Edict in the year 1775, and established again in 1779. There are upwards of three thousand priests belonging to Goa, who are resident at the place, or reside with their cures at a distance.*

The other parts of the coast presenting few remarkable objects, it will be proper to pass the mountainous ridge, and first visit Porna, the capital of the western empire of the Marattas, but a mean, defenceless city; the archieves of the government, and in all appearance the chief seat of power, being at Poorunder, a fortress about eighteen miles to the south-east.

Visiapour, in the Maratta territory, also called Bejapour, is a considerable city, and was once the capital of a large kingdom of the same name. In the vicinity are celebrated diamond mines.

Hydrabad is the metropolis of the Nizam's territory, and particularly of the celebrated kingdom or province of Golconda, but seems otherwise little remarkable. Betwixt these two last-named cities stands Calberga, formerly the capital of a powerful kingdom, that of the Deccan, under the Bamineah dynasty, as already mentioned in the general view of Hindostan. On passing the Kistna, few places of distinguished note occur. The regions on the great river Toombuddra, which rises nearly in the parallel of Seringapatam, and pursues a northern course of about 350 miles till it joins the Kistna after passing Canoul, have been delineated with superior accuracy in Rennell's last map, April 1800.

In the interior of Travancore and Malabar, on the S. point of Hindostan, near Ceylon, are the Syrian Christians; a people who have been settled here, though long unknown to Europeans, from the first ages of Christianity. The Portuguese, in their discoveries of the sixteenth century, make the first mention of them. Since that time little notice has been taken of their accounts, and in modern times their existence began to be questioned. Dr. Buchannan, however, in the year 1806, travelled into their country, and confirms the Portuguese accounts. He says, that their churches bear some resemblance to the old parish churches in England. In the articles of their faith, and in their church government, they

* Dr. Buchannan.

agree in every material point with the church of England. Their archbishops, bishops, deacons, and other inferior officers, are the same. They have a Liturgy, from which they read prayers in public: and their manner of performing divine service agrees with that of the Episcopal church. Their churches are 55 in number. Among these Christians have been preserved in manuscript the ancient copies of the Bible, which will probably be of essential service in throwing light upon many disputed passages.

ISLAND OF CEYLON.

EXTENT AND NAME, RELIGION, POPULATION, MANNERS AND CUSTOMS, TOWNS, MANUFACTURES, CLIMATE, PRODUCTIONS, RIVERS, MOUNTAINS, FORESTS, ZOOLOGY, MINERALOGY, PEARL FISHERY, OTHER ISLES.

Extent and Name.] THOUGH this island be not above a fifth part of the size ascribed to it by the strange exaggeration of the ancients, it still approaches to that of Ireland, being generally supposed to be about 260 miles in length by about 150 in breadth: but in the wide continent of Asia, territory is on so large a scale, that what in Europe would constitute a kingdom, is here scarcely a province. This isle is the Trapobana, Salice, and Sieledeba of the ancients, the Serendib of the Arabians: in the Hindoo language it is called Lanca; and the people are doubtless of Hindoo origin. Its history is little known. In the reign of Claudius, ambassadors were sent to Rome by a Singalese rajah, raja, or king, whom Pliny, mistaking his title for his name, has called Rachia.* When the Portuguese seized this island, 1506, the chief monarch was the king of Cotta; but the central province of Candea, or Candi, afterwards appears as the leading principality. The Portuguese retained possession of the shores (the inland parts rising to a high table land, bounded by forests and difficult passes,) till about 1660, when they were expelled by the Dutch, between whom and the king of Kandi a war arose 1759, which terminated 1766 by the submission of the latter, who surrendered all the coasts, and agreed to deliver yearly a quantity of cinnamon at a low rate.† From the sordid domination of the Dutch it has recently passed under the more liberal banner of British power.

Religion.] The religion of Ceylon is the ancient worship of Boodh, whose images appear with short and crisped hair, because it is fabled that he cut it with a golden sword, which produced that effect.‡ The worship of Boodh is supposed to have originated in

* Pliny, vi. 22.

† Wesdin, 42.

‡ As. Res. vi. 4534

Ceylon ; and thence to have spread to ancient Hindostan, to exterior India, Tibet, and even to China and Japan. Such are the traditions in Siam, Pegu, &c. which suppose that Boodh, probably a kind of Confucius or deified philosopher, flourished about 540 years before the Christian era ; and as the Boodhis in general shew a prodigious superiority of good sense to the visionary Brahmins, their accounts deserve more credit than the idle dreams and visionary chronology of the Pundits. Others however suppose that the worship of Boodh originated in exterior India.*

Ceylon is believed by some of the Easterns, both Mahomedans and Hindoos, to have been the residence of the first man, because it abounds in trees pleasant to the eyes, and good for food, and is famous for its rare metals, and precious stones. There is gold, bdelium and the onyx stone. The rocky ridge, which connects this happy island with the main land, is called *Adam's Bridge* ; the lofty mountain in the middle of the island, and visible from all parts of it, is called *Adam's Peak*, and there is a sepulchre of immense length, called *Abel's tomb*. All these names were given many ages before Christianity was introduced from Europe.

Population.] In this island the population under the British government amounts to upwards of 500,000 ; one third of which profess Christianity. The number of natives is unknown.

The hundreds of cities mentioned by ancient writers are now esteemed completely fabulous ; nor does there seem to be one place deserving the name of a city, mentioned either in ancient or modern record. This island is only important in a commercial view, from its celebrated products of cinnamon and gems. The harbor of Trincomali on the E. is to the British of great consequence, because there is none on the eastern coast of Hindostan : and it has even been suggested that in case any revolution, to which all human affairs are subject, should expel the British from the continent of Hindostan, this island might afford an extensive and grand asylum, where the British name and commerce might be perpetuated.

Manners and Customs.] The natives of Ceylon, called Singalese, either from a native or Portuguese term, are not so black as those of Malabar, and have a few manners and customs distinct from other Hindoos. It is said that several brothers may have one wife in common, as in Tibet, but the polygamy of males is also allowed.† In general, chastity is little esteemed in the oriental countries ; and the morality of many nations is so lax in this respect, that the intercourse of the sexes is considered as far more indifferent than the use of certain foods. The language is rather peculiar ; but some of the natives understand both the Tamulic and that of Malabar.

Towns.] The native town Kandi, in the centre of the isle, seems to be of small size and consequence, and probably only dis-

* There are three chief distinctions between the priests of Boodh and the Brahmins : the former may lay down the priesthood ; they eat flesh, but will not kill the animal ; and they form no cast nor tribe, but are from the mass of the people.

† Weddin, 435.

tinguished by a palisade and a few temples.* It was taken by the Portuguese in 1590; but no recent traveller appears to have visited this deep recess of sovereign power.

The chief town of the Portuguese, Dutch, and English possessions, is Colombo, on the W. side of the Island, a handsome place, and well fortified; the residence of the governor is elegant, but only consists of one floor, with a balcony to receive the cool air.† Ceylon being exposed on all sides to the sea breezes, the climate is not so hot as that of Hindostan; far less pestiferous, like the marshy exhalations of Batavia. At Colombo there is a printing press, where the Dutch published religious books in the Tamulic, Malabar, and Singalese languages. The name of Colombo seems indigenous, as well as that of Nigombo, a fortress a few miles to the N. of this capital.

The northern parts of Ceylon are chiefly left to the natives, but the town of Jafnapatam, or Jafna, was a Dutch settlement in a detached isle. The grand pearl fishery is conducted in the gulf of Manar, near Condatchey, a miserable place in a sandy district, to which water is brought from Aripoo, a village four miles to the south: the shoals near Rama's bridge supply inexhaustible stores of this valued production.‡

On pursuing the shore towards the east, it is mostly guarded by sandbanks, or rocks; but the whole harbor of Trincomali opens at the mouth of the Mowil Ganga, the Ganges of Ptolemy's large map of Taprobana; and was defended by a strong fortress. Battacola is an inferior haven on the same side of the Island.

But the southern side of Ceylon has been chiefly visited, abounding with gems and other rich productions. Matura was a Dutch factory near the most southern promontory called Dondra, where excellent kinds of cinnamon were collected, and varieties of precious stones abound in the vicinity.§ Not far to the W. of Matura is Gale, or Galle, near a point so called, a handsome town, strongly fortified, on the projecting angle of a rock.¶

Manufactures.] There is little mention of any manufactures conducted in this island; but the natives seem not unskilled in the common works in gold and iron. The Dutch ships used to sail from Galle, laden with cinnamon, pepper, and other spices; nor must pearls and precious stones be forgotten among the articles of export. The colombo wood, a bitter in recent use, receives its name from the capital; but its native country or district seems still unknown.

Climate.] The climate and seasons correspond in some degree with the adjacent continent; yet the exposure on all sides to the sea renders the air more cool and salubrious. The general aspect of the country somewhat resembles that of southern Hindostan; a high table land, in the centre, being surrounded with low shores, about six or eight leagues in breadth. High mountains, prodigious forests, full of aromatic trees and plants, and many pleasant rivers and streams diversify this country, which by the Hin-

* Mandelslo, 279. who gives a list of the other towns.

† As. Res. v. 397.

§ Thunberg, iv. 195. 231.

† Thunberg, iv. 175.

¶ Ib. 194.

does is esteemed a second paradise. The vales are of a rich fat soil ; and, when cleared, amazingly fertile in rice, and other useful vegetables.

Productions.] Ceylon is chiefly distinguished for its spices. The groves of cinnamon are sometimes a mile in length. The soil is very sandy, and in this respect favorable to the growth of the cinnamon trees.

Rivers.] There are five considerable rivers described by Ptolemy ; of which the chief is the Morvil Ganga, on which stood Maagramum, the capital in his time, and modern Kandi stands on the same stream, one of the royal palaces being on an isle in that river, where the monarch keeps a treasure of gems ; and his officers, like those of exterior India, are decorated with slight chains of gold.

Mountains.] The chain or chains of mountains run N. and S. These mountains seem granitic ; and are peculiarly rich in precious stones imbeded in primitive quartz. What the Mahometans have termed Adam's Peak is esteemed the highest ; and is in Sanscrit called Salmala, Boodh being fabled to have ascended from it to heaven.

Forests.] The forests are numerous and large, the haunts of innumerable elephants, like the Gauts of southern Hindostan. An ample account of the botany of this island is given by the skilful Thunberg : one of the most peculiar and precious trees is that producing the best cinnamon.

Zoology.] The elephants of Ceylon are supposed only to yield in beauty to those of Siam, and chiefly frequent the southern part of the island. Buffaloes are also found in a wild state, while the tame are used in rural economy. The wild boars are numerous and extremely fierce ; nor is the tiger unknown. Bears, chakals, and many tribes of deer and monkeys are also natives of Ceylon. The alligator, frequent in the Hindoo rivers, here sometimes reaches the length of eighteen feet. Among a vast variety of elegant birds, the peacock, that rich ornament of the Hindoo forests, swarms in this beautiful island.

Mineralogy.] Ceylon, opulent in every department of natural history, presents many minerals of uncommon beauty. Not to mention iron, gold, plumbago, &c., Thunberg has given a list of the precious stones, among which are the genuine ruby, sapphire, and topaz. The finest rock crystals, both the colorless, and those of a violet color called amethysts, are found here in abundance, and are generally dark brown or yellowish ; while those of other colors come from Brazil and Tyrol. It is also asserted that this island produces the genuine emerald, which is commonly esteemed peculiar to Peru. The cat's eye seems the characteristic mineral of Ceylon, as the noble or genuine opal is of Hungary.

Pearls.] Nor must the pearl fishery be forgotten, which commonly begins on the N. W. shore about the middle of February, and continues till about the middle of April, when the S. W. monsoon commences.* The village of Condatchey is then crowded

* As, Res. v. 394.

with a mixture of thousands of people of different colors, countries, casts, and occupations ; with numerous tents and huts, and bazars, or shops ; while the sea presents many boats hastening to the banks, or returning with the expected riches. The divers are chiefly Christians or Moslems, who descend from five to ten fathoms, and remain under water about two minutes each, bringing up about a hundred oysters in his net. These pearls are always formed like the coats of an onion, around a grain of sand or some other extraneous particle. The yellow or gold colored are most esteemed by the natives ; and some are of a bright red lustre ; the dull grey and blackish are of no value.

Other Isles.] There are no other isles of any consequence near the coast of Hindostan. Those called Lacadives and Maldives scarcely merit a particular description in a work of this general nature, and the Andaman and Nicobar isles properly belong to exterior India, where a short account of them may be found after the peninsula of Malacca, to which coast they are the nearest. It may here suffice to observe that in the Hindoo language *dive* implies an isle : and Ptolemy imputes those which mariners saw before they reached Ceylon, that is the Maldives, at more than thirteen hundred. They form as it were an oblong inclosure of small low regular isles, around a clear space of sea with very shallow water between each. They are governed by a chief called Atoll, and the trade is in cowrie shells, with cocoa nuts and fish.† The language is Singalese, and there are some Mahometans. The Lacadive islands form a more extended group, though only thirty in number. They also trade in cocoa nuts and fish ; and ambergris is often found floating in the vicinity.

Goa is a small fertile island 8 leagues in circumference N. of the Lacadives, on the W. coast of Hindostan, lat. 15° 30' N.



PERSIA.‡

CHAPTER I.

HISTORICAL GEOGRAPHY.

DIVISIONS, NAME, EXTENT, POPULATION, PROGRESSIVE GEOGRAPHY, PROVINCES, HISTORICAL EPOCHS, ANCIENT MONUMENTS, MODERN HISTORY, EASTERN PERSIA, RELIGION, GOVERNMENT, POPULATION, ARMY, NAVY, REVENUES, POLITICAL IMPORTANCE AND RELATIONS, MANNERS AND CUSTOMS, LANGUAGE, LITERATURE, EDUCATION, CITIES, MANUFACTURES AND COMMERCE.

Divisions.] THE ancient and powerful monarchy of Persia has, during the greater part of the last century, been in a most distracted and divided condition, and the inhabitants, formerly

† Pennant, i. 51.

‡ From Pinkerton's Abridgment, with improvements.

renowned for wisdom and benignity, have been degraded by civil discord, and mutual enmity and distrust, into a temporary debasement both moral and political. This empire seems at length, in some degree, to have settled in two divisions, the eastern and the western ; while the provinces near the Caspian, secured by mountains and fastnesses, have asserted a kind of independence. These circumstances are unfavorable to a just and exact delineation of the present state of the country ; but the chief limits and many of the most important geographical topics have been inviolably fixed by the hand of nature ; and the following description shall embrace modern Persia in general as it was in the time of Chardin, combined with the most recent and authentic information.

Name.] The name of Persia spread from the province of *Parse* or *Fars* throughout this mighty empire. This name, has, however, been little known to the natives, who in ancient and modern times, have termed their country *Iran*, under which denomination were included all the wide regions to the S. and W. of the river Oxus, or Gihon, the Amu of the Russians and Tartars ; while the countries subject to Persia beyond that celebrated river were in ancient times styled *Aniran*.

Extent.] From the mountains and deserts, which, with the river Araba, constitute the eastern frontier towards Hindostan, Persia extends more than 1200 miles in length, to the western mountains of Elevend, and other limits of Asiatic Turkey. From south to north, from the deserts on the Indian sea, in all ages left to the wild tribes of Arabs, who live on fish, to the other deserts near the sea of Aral are about 1000 miles. It lies between lat. 25 and 44 N. and lon. 44 and 70 W. and is estimated to contain about 1,300,000 square miles.*

The limits of Persia, according to Sir John Chardin, differ from those of other countries, which are separated from their neighbors by a line, a rivulet, or some other such artificial or natural boundary. "Persia has, on almost every side of it, a space of three or four days' journey, uninhabited, though the soil be, in many places, the best in the world, particularly on the sides of the east and the west. The Persians look upon it as a mark of true grandeur, to leave thus abandoned the countries that lie between great empires, which prevents, they say, contests about their limits, these desert countries serving as walls of separation between kingdoms."†

Original Population.] The original population of the mountainous country of Persia appears to have been indigenous, that is, no preceding nation can be traced ; and in the opinion of all the most learned and skilful inquirers, this nation is Scythic or Gothic, and the very source and fountain of all the celebrated Scythian nations. While the southern Scythians of Iran gradually became a settled and civilized people, the barbarous northern tribes spread around the Caspian and Euxine seas ; and besides the powerful settlements of the Getæ and Massagetae, the Gog and Magog of oriental authors, and others on the north and east of the great ridge

* Hassel.

† Harmar's Observ. vol. iv. p. 276.

of mountains called Imaus, or Belur Tag, they detached victorious colonies into the greater part of Europe many centuries before the Christian era. The ancient Medes and Parthians, in the north of Persia appear however to have been of Sarmatic, or Slavonic origin, and to have spread from their native regions on the Volga, towards the Circassian mountains, along which ridge they passed to the south of the Caspian, the ancient site of Media and Parthiene. The grand chain of Caucasus forms a kind of central point of immigration and emigration from the E. and W. whence the great variety of nations and languages that are traced even in modern times. The late very learned and excellent Sir William Jones, who did honor to his country and century, has repeatedly expressed his opinion, that while the Parsi and Zend, or proper and peculiar Persian language, is of the same origin with the Gothic, Greek, and Latin ; the Pehlavi is Assyrian or Chaldaic.

Progressive Geography.] The contests of ancient Persia with Greece and the Greek colonies established in Asia Minor, then within the wide limits of the Persian empire, have rendered the ancient geography of this country not a little luminous. Herodotus, the father of history, was born at Halicarnassus, one of these colonies ; and his account of the twenty satrapies, or great provinces of the Persian empire, in the reign of Darius Hystaspes, has been ably illustrated in a late work of Major Rennell. The present design however only embraces the modern provinces and limits ; and the former may be thus arranged, proceeding from the W. towards the N. E. after remarking that the limits of the ancient and modern provinces often coincide, as they consist of rivers and ranges of mountains.

Provinces.] 1. Georgia, or more properly Gurgustan, in which may be included Daghistan and Shirvan. These may be considered as constituting the Albania of the ancients ; a name applied in different quarters to mountainous regions.

2. Erivan, a large portion of ancient Armenia, between the river Kur, or Cyrus, on the north, and the Aras, or Araxes, on the south.

3. Aderbijan, including Mogan, the Atropatena of the ancients.

4. Ghilan, to the east of the last, on the Caspian sea, and synonymous with the ancient Gela.

5. To close the list of countries on the Caspian, Mazendran appears encircled on the south by a lofty branch of the Caucasian chain, the seat of the Mardi of antiquity ; to the E. of which was the noted province of Hyrcania, now Corcan and Dahistan.

6. Returning to the W. frontier, you come to Irac Ajemi, chiefly corresponding with the ancient Ecbatana. In the south of this province is Ispahan, the modern capital of Persia.

7. Chosistan, extending to the river Tigris ; but the capital, Bussora, or Basea, after a recent vain attempt of the Arabs, remains subject to the Turks. This province corresponds with the ancient Susiana.

8. The celebrated province of Fars, Persis, or Persia proper, surrounded with mountains on the N. the W. the S., and on the E.

separated by a desert from Kerman. Fars contains the beautiful city of Shiraz, with Istakar, and the ruins of Persepolis.

9. Kerman, the ancient Carmania.

10. Laristan, a small province on the Persian gulf, to the S. E. of Fars, of which some regard it as a part; nor does the subdivision seem to be known in ancient times, though the long ridges of mountains on the S. of Fars, and generally about 60 miles from the Persian gulf, seem here naturally to indicate a maritime province; which, if the ancient Persians had been addicted to commerce, would have been the seat of great wealth by intercourse with Arabia, Africa, and India.

11. To the E. of Kerman is the large province of Mekran, which extends to the Indian deserts, and is the ancient Gadrustan, or Gedrosia. This province has always been unfertile and full of deserts; and classical geography here presents only one mean town, called Pura, probably Borjian, on the W. frontier.

12. Segistan, another wide frontier province towards India, was chiefly the Arachosia and Saranga of antiquity; while the province of Paropamisus, in the N. E. encroached on Candahar, and the modern limits of Hindostan.

13. The grand and terminating division of modern Persia in the N. E. is Corasan, bounded by the Gihon, or Oxus, on the N. E. and on the S. by the lake of Zere, or Zurra, the grand Aria Palus of antiquity. The classical provinces comprised within Corasan, are, in the N. Margiana, and in the S. Aria.

Besides these provinces, and exclusive of Asiatic Turkey on the W. the ancient Persian empire comprised Bactriana or Balk, which may be termed a wide and well watered kingdom, of between 300 and 400 miles square; and on the other side of the Oxus, Sogdiana, or the country on the river Sogod, which passes by modern Samarcand. The fifteenth satrapy of Herodotus comprises the Sacæ and Caspii, probably the country of Shash, and some other tribes nearer the Caspian sea. This province adjoined on the W. to Corasmia, which belonged to the sixteenth satrapy, and is now the desert space of Kharism, with the small territory of Khiva.

The countries last mentioned form so considerable a part of what is called Independent Tartary, and have in all ages been so intimately connected with Persian history, that some account of them shall be annexed to this article; which, joined with that in the Chinese empire, will complete the description of the countries between the dominions of that great state and those of Russia and Persia, so far as the very imperfect materials will allow. The progressive geography of Persia may be traced through Strabo, Pliny, the historians of Alexander, and other classical sources; and afterwards through the Arabian authors, Ebn Haukal, Abulfeda, &c. &c. to the modern labors of Chardin, and other intelligent travellers.

Historical Epochs.] The chief historical epochs of the Persian empire may be arranged in the following order:

1. The Scythians, or barbarous inhabitants of Persia, according

to the account of Justin, conquered a great part of Asia, and attacked Egypt, about 1500 years before the reign of Ninus, the founder of the Assyrian monarchy ; that is, so far as the faint light of chronology can pretend to determine such remote events, about 3660 years before the Christian era. The Egyptians, a people of Assyrian extract, as the Coptic language seems to evince, were from superior local advantages civilized at a more early period, and their genuine chronology seems to begin about 400 years before Christ. The venerable historical records contained in the scriptures attest the early civilization and ancient polity of the Egyptians. The first seat of the Persian monarchy was probably in the N. E. on the river Oxus ; while the Assyrians possessed the Euphrates and the Tigris, and the S. W. of Persia.

The history of the Assyrian empire begins with Ninus, about 2160 years before Christ, who is said to have formed an alliance with the king of Arabia, and, in conjunction with him, to have subdued all Asia, except India and Bactriana ; that is, according to the ancient knowledge, he subdued Asia Minor and the west of Persia.

2. Zoroaster, king of Bactriana, is said to have been contemporary with Ninus, and to have invented magic ; that is, he was a wise man, who could produce uncommon effects by common causes. But the history of this Persian lawgiver is lost in remote antiquity.

3. Cyrus founds what is called the Persian empire, 557 years before the Christian era, and soon after takes Babylon. This great event may be said only to have disclosed the Persians to the civilized nations of the west, for the native Persian histories ascend to Kayumarras, great grandson of Noah, and the ancient traditions chiefly refer to wars against Touran and India, which indicate the primitive eastern position of the people.

4. The overthrow of the first Persian empire by Alexander, B. C. 328, followed by the Greek monarchs of Syria, and the Grecian kingdom of Bactriana, of which last an interesting history has been compiled by the learned Bayer. It commenced about 248 years before Christ, and contained several satrapies, among which was Sogdiana.

5. The Parthian empire, which likewise began about 248 years B. C. This was a mere revival of the Persian empire, under a new name.

6. Ardshur, or Artaxerxes, about the year 220 of the Christian era, restores the Persian line of kings ; this dynasty being called Sassanides.

7. The conquest of Persia, by the Mahometans, A. D. 636. The native kingdom was revived in Corasan, A. D. 820 ; and after several revolutions resumed its former situation.

8. The accession of the house of Boniah, A. D. 934.

9. That of the house of Sefi, or Sofi, A. D. 1501, whence the title of Sofis of Persia, for it is unnecessary here to repeat the conquests of Zingis and Timur, and the subsequent divisions and revolutions.

10. The reign of Shah Abas, surnamed the Great, A. D. 1586.

11. The brief conquest by the Afghans, 1722 ; and consequent extinction of the house of Sefi, and elevation of Nadir, surnamed Thamas Kouli Khan, A. D. 1736. This ferocious chief was born in Corasan ; and after a reign of eleven years was slain, 20th June, 1747, near the city of Meshid, in the same country.

Ancient Monuments.] Some account of the modern history and state of Persia shall be given, after a very brief view of the ancient monuments. Of these the ruins of Persepolis are the most celebrated and remarkable. They are situated at the bottom of a mountain, fronting S. W. about forty miles to the north of Shiraz. They command a view of the extensive plain of Merdasht, and the mountain of Rehumut, encircles them in the form of an amphitheatre ; the nature of these ruins may be seen in the numerous plates which have been published ; and it would be an idle attempt to describe in few words the grand portals, halls, and columns, and numerous reliefs and devices. There are many inscriptions in a character not yet explained, the letters of which somewhat resemble nails, disposed in various directions.

Several small edifices and caverns of similar architecture, are found in various parts of Persia, all which undoubtedly preceded the Mahometan conquest, but it is difficult to ascertain their precise era.

In many parts of Persia there must remain several curious monuments of antiquity, which might well excite the curiosity of the learned traveller to investigate this interesting country. The design of the present work rather requires some information concerning the modern state of this once powerful monarchy, which shall be chiefly derived from Mr. Franklin's view of the transactions in Persia from the death of Nadir Shah, 1747, to 1788 ; combined with the accounts of Gmelin, who by command of the Empress of Russia inspected the northern provinces and Ghilan ; and those of Pallas, in his last travels, during the years 1793 and 1794.

Modern History.] Nadir Shah was succeeded by his nephew, Adil, who, after a transitory reign, was followed by his brother Ibrahim. Mean while Timur Shah reigned in Cabul, Candahar, and the Persian provinces adjacent to Hindostan ; and availing himself of the confusion in Persia, he besieged Meschid, which he took after a blockade of eight months.

This event was followed by such anarchy and confusion, that it seems impossible to settle the chronology of the crimes which were committed during the contests of numerous chiefs, which desolated almost every province from Gombroon to Russia, leaving indelible marks of destruction throughout the kingdom, and changing even the very character of the people, whose prudence is degenerated into cunning, and their courage into ferocity.

At length the government of western Persia was happily settled for a considerable space of time in the person of Kerim Khan, who however never assumed the title of Shah, but was contented with that of Vakeel, or regent. This great and mild prince had been a

favorite officer of Nadir ; and at the time of that tyrant's death was in the southern provinces, where he assumed the power at Shiraz, and was warmly supported by the inhabitants of that city, who had observed and revered his justice and beneficence. In reward he embellished this city and its environs with noble palaces, gardens and mosques, improved the highways, and rebuilt the caravanseras. His reign was established by the sword, but was afterwards unsullied by blood ; and its chief peril arose from extreme mercy. His charity to the poor, and his attempt to restore the commerce of the country are gratefully remembered by natives and Europeans.

Another unhappy period of confusion followed the death of Kerim ; his relation Zikea or Saki seized the government, which was contested by another kinsman, Ali Murad. The detestable cruelty of Zikea led to his own destruction, and he was massacred by his troops at Yezdecast, about six days journey N. of Shiraz, on the road to Ispahan.

Abul Futtah was then proclaimed king by the soldiers, and to him Ali Murad submitted ; but Sadick, brother of Kerim, opposed his nephew's elevation. Sadick marched from Bussora at the head of an army, dethroned the young monarch, and after depriving him of his sight, ordered him into strict confinement.

Ali Murad, then at Ispahan, rebelled against this usurper, and with an army of 12,000 men besieged and took Shiraz, and put Sadick to death with three of his children. A son Jaafar was appointed by the new king governor of Kom, a city or province to the N. W. of Ispahan.

Ali Murad was now regarded as peaceable possessor of the Persian throne ; but an eunuch called Aga Mamet or Akau, had, since the death of Kerim, assumed an independent sway in the Caspian province of Mazendran. When advancing against him, Ali Murad fell from his horse and instantly expired. Jaafar having assumed the sceptre, was defeated by Akau at Yezdecast, and retired to Shiraz.

In 1792, Akau again collected an army, and conquered the cities of Kasbin and Tekheran or Tahiran. Having then reinforced his troops with those of Ali Khan of Hamfa, a prince who had asserted a kind of independency since the death of Ali Murad, he advanced against Jaafar, who retreated to Shiraz, where he perished in an insurrection, and his son Lutuf fled to the south.

Akau had now no rival except Hidaet, khan of Ghilan, who was forced to fly from Rasht his place of residence, but was killed near the port of Sinfili. In consequence of these events Akau became monarch of all western Persia ; and being an eunuch, had nominated for his successor his nephew Baba Serdar.

Eastern Persia.] Having thus as briefly as possible discussed the recent history of western Persia, the eastern half yet remains, being unhappily separated in a great degree by high ridges of mountains and sandy deserts, a circumstance which has been repeatedly productive of great disasters to this wide empire.

This natural separation has occasioned great obscurity in the

ancient history of Persia, the eastern half remaining a distinct and independent country, of the same general name with the western, but with limits and history totally distinct.

The best materials concerning the kingdom of Candahar seem to be those collected by Rennell ; and they are, if possible, yet more scanty than those concerning the western half. Ahmed Abdalla, first king of Candahar, was originally the chief of an Afgan tribe, conquered by Nadir Shah, on whose death he suddenly appeared among his former subjects, and soon erected a considerable kingdom in the eastern part of Persia, including most of the Indian provinces ceded by the Mogul to Nadir. He established the capital at Cabul, at a secure distance behind the mountains of Hindoo Koh.

Ahmed died about the year 1773, and was succeeded by Timur, who continued to reside at Cabul ; but the monarchy has been styled that of Candahar from a central province. The successor of Timur was Zemaun, who probably still rules this extensive country, which has happily been free from the intestine commotions which have desolated western Persia. Since the great battle of Panniput, fought by Ahmed Abdalla against the Marattas 1761, the kingdom of Candahar seems to have remained in a peaceful state, and the government is of applauded lenity.

The farthest extent of this monarchy on the east comprises Cashmir, which was probably subdued about 1754.* In the west, according to the opinion of Rennell,† it extends to the vicinity of the city of Tershiz, or Turshiz, in the same line of longitude with Meshid, a length of about 900 miles. The province of Sindhi, at the mouth of the Indus, is also subject to Zemaun, with the western part of Moultan ; but the remainder on the east bank of that river, and the wide and fertile province of Lahore, are possessed by the Seiks, a warlike nation. The other provinces are Kuttore, Cabul, Candahar, and within the Persian boundary Segistan, and probably Mekran, with the eastern part of Corasan, and the province of Gaur, the medial breadth being probably about 500 miles. The remainder of Balk and Great Bucharia belong to Independent Tartary. The chief subjects of Zemaun are the Afgans, or people of the mountains between Persia and Hindostan, who may be considered as the founders of the empire ; the others are Hindoos, Persians, and a few Tartars.

Religion.] The Persians are Mahometans of the sect of Ali ; for which reason the Turks, who follow the succession of Omar and Abu Bekr, call them heretics. Their religion is, if possible, in some things more fantastical and sensual than that of the Turks ; but in many points it is mingled with some Bramin superstitions. When they are taxed by the Christians with drinking strong liquors, as many of them do, they answer very sensibly, " You Christians whore and get drunk, though you know you are committing sins, which is the very case with us."

In one point they far excel many professing christians, who

* Forster, ii. 14.

† Page 152.

would be as ashamed to be seen at prayer, or attending the ordinances of Christ, as in the commission of some disgraceful crime. The Persians have no marks of this false modesty. If a bold, masculine piety, and a sincere, awful sense of the Deity are very consistent things, then this fear of man among Christians must be owing to an error in education.*

Having mentioned the Bramins, the comparison between them and the Persian *guebres*, or *gaurs*, who pretend to be the disciples and successors of the ancient magi, the followers of Zoroaster, may be highly worth a learned disquisition : That both of them held originally pure and simple ideas of a Supreme Being, may be easily proved ; but the Indian bramins and parsees accuse the *gaurs*, who still worship the fire, of having sensualized those ideas, and of introducing an evil principle into the government of the world. A combustible ground, about 10 miles distant from Baku, a city in the north of Persia, is the scene of the *guebres* devotion. It must be admitted, that this ground is impregnated with very surprising inflammatory qualities, and contains several old little temples ; in one of which the *guebres* pretend to preserve the sacred flame of the universal fire which rises from the end, and a large hollow cane stuck in the ground, resembling a lamp, burning with very pure spirits. If any tube be inserted in the ground, and the top of the ground touched with a coal, a flame bursts forth. They have no floors ; this is the mode of their lighting their rooms, of cooking their victuals, and by these tubes, piling the stones over them, they burn their lime. Their springs, particularly on the isle of Wetoy, furnish a black naphtha in great quantities. When scattered on the sea it burns ; the flame is often wafted to a great distance.

The Mahometans are the declared enemies of the *gaurs*, who were banished out of Persia by Shah Abbas. Their sect is said to be numerous, though tolerated in very few places.

The long wars between the Persians and the Romans, seem early to have driven the ancient Christians into Persia and the neighboring countries. Even to this day, many sects are found that evidently have Christianity for the ground-work of their religion. Some of them, called Souffees, who are a kind of quietists, sacrifice their passions to God, and profess the moral duties. The Sabean Christians have, in their religion, a mixture of Judaism and Mahometanism ; and are numerous towards the Persian gulf. We have already mentioned the Armenian and Georgian Christians, who are very numerous in Persia. The present race of Persians are said to be very cool in the doctrines of Mahomet, owing chiefly to their late wars with the Turks.

Government.] The government of Persia, like that of all other oriental states, appears to have been always despotic ; but its administration in Eastern Persia, or the kingdom of Candahar, is represented as mild. The state of the people seems to be deplorable, being subject to the arbitrary power and extortions of

the numerous Khans, or chiefs. These are sometimes governors of provinces, sometimes only possessors of small districts, and pretend to hereditary succession, though liable to be forfeited or put to death by the arbitrary mandate of the sovereign. The great Khans are sometimes styled Beglerbegs, or lord of lords ; and in time of war Serdars, or generals. Those who command cities are commonly styled Darogas, or governors.*

Population.] The present state of the population of Persia is reckoned by Hassel at 22,000,000, of which 3,000,000† are in W. Persia, and 19,000,000‡ in E. Persia. Pinkerton strangely reduces the number in both to only 10,000,000.

Though Mr. Franklin have supposed that the rival kings in western Persia could not muster more than twenty thousand men each, yet from the account of Pallas, Aga Mamet raised an army of seventy thousand. But supposing western Persia united, and somewhat reinstated in prosperity, it is not probable that the army could exceed 100,000 effective men, which may probably also be the amount of that of Candahar. Yet the Afgans alone, who are a brave people, are supposed by Hassel, able to raise an army of 300,000 men ; and Western Persia, in the opinion of the same author, can raise 100,000 men.

Navy.] From some particular precepts in the laws of Zoroaster, which it was impossible to observe at sea, the ancient Persians were never a maritime people, though they commanded an ample gulf with the mouths of the Euphrates and the Tigris. The commerce on the Indian ocean, as well as on the Caspian sea, has been always chiefly conducted by the Armenians, a most industrious and respectable people. Hence the commerce of this country, so advantageously situated, has always been in the hand of strangers ; while the natives, with feudal pride, attend to their horses and the chace, and lead what is called the life of a gentleman, neither improving their own property nor the country in general ; scarcely one Persian vessel, therefore, has in any age navigated the sea.

Revenues.] The actual revenues of Persia it is impossible to estimate ; but the ruinous state of the country must render it unproductive. The Turkish revenue has been computed at seven millions sterling ; and it may perhaps be conjectured with some show of probability, that the monarch of Candahar may draw from his various and extensive provinces about three millions sterling ; while western Persia scarcely supplies two millions. Chardin says that the ancient revenue consisted partly in contributions in kind ; Kurdistan, for instance, furnishing butter, while Georgia supplied female slaves ; and partly arose from the royal domains, with a third of metals, precious stones, and pearls ; and a few duties and taxes. The whole revenue was by some estimated at 700,000 tomans,§ or about thirty-two millions of French livres.

* Chardin, vi. 41.

† Schatzung.

‡ Olivier.

§ The toman is computed at about 3l. 7s. being rather more than equal to two gold mohurs, a gold coin of Hindostan, worth about thirty-two shillings. Chardin computes the toman at forty-five livres of his time.

Political Importance and Relations.] The political importance and relations of Persia are now greatly restricted. Were the western part united under one sovereign, it might lend effectual assistance to the Russians in any design against the Turks. But in its recent distracted state, Persia has been little formidable, even to the declining power of Turkey; and the Russians seem to entertain no desire of extending their conquests over the mountainous Caspian provinces, which Peter the Great once held and abandoned, so that Persia seems secure on the side of Russia, as well as on that of Turkey and Arabia; this unhappy security being in fact one grand cause of the civil anarchy. This part of Persia is in confederacy with France.*

Eastern Persia, or the kingdom of Candahar, appears to have little to apprehend from the Seiks on the other side of the Indus; and the Uzbek Khans of Balk, Bucharia, and Kharism, are disunited and little formidable, though they command a warlike people. It is therefore more probable that these countries may be vanquished by the kings of Candahar, than that any danger should arise from the Uzbeks. A contest may probably happen between eastern and western Persia; but even if united under one sovereign, it would be long before this country could resume her rank among powerful nations.

Manners and Customs.] The manners and customs of the Persians, in the 17th century, have been amply detailed by Chardin, Thevenot, Sanson, and other travellers.

More modern ideas of Persian manners may be derived from the travels of Gmelin, in Ghilan.† The Persians still pride themselves in universal politeness, and are hospitable, not however without the expectation of presents in return. They seem to consider themselves as more wise and sagacious than other nations, yet are passionate; and the recent commotions have imparted a taint of cruelty to the national character.‡ Of a sanguine temperament, both rich and poor are generally gay; and immoderate mirth will succeed the most violent quarrels. They are extremely attached to the fair sex, and not averse to wine. The general complexion is fair, somewhat tinged with olive; but those in the south about Shiraz, of Candahar, and the provinces towards India, are of a dark brown. They are commonly fat, with black hair, high forehead, aquiline nose, full cheeks, and a large chin, the form of the countenance being frequently oval. The men are generally strong and robust, and inclined to martial exercises, but they are particularly subject to disorders of the eyes. They generally shave the head, and wear high crimson bonnets; but the beard is sacred, and tended with great care. They often wear three or four light dresses, one above the other, fastened with a belt and sash; and they are fond of large cloaks of thick cloth. The women wrap around their heads pieces of silk of different

* Hassel.

† Histoire des Découvertes faites par divers savans Voyageurs dans plusieurs contrées de la Russie et de la Perse. Six vols. 8vo. Berne, 1779—1787.

‡ Découv. Russ. ii. 276.

colors ; and their robes are rather shorter than those of the men. The Persians eat twice or thrice a day, dining about noon, but the chief repast is the supper, as with the ancient Greeks and Romans. The most usual dish is boiled rice, variously prepared. The meat is boiled to excess, and the meal is enlarged with pot-herbs, roots, and fruit, cakes, hard eggs, and above all sweet-meats, of which they are extremely fond. They are remarkable for cleanliness, both in their persons and habitations.

Marriages are conducted by female mediation ; and the pomp and ceremonies somewhat resemble the Russian. Polygamy is allowed ; but the first married is the chief wife. The tombs of the rich are often grand, as are the cenotaphs of the twelve Imams, or vicars of the prophet, regarded by the Chias, as his only lawful successors.

Language.] The language of Persia is perhaps the most celebrated of all the oriental tongues, for strength, beauty, and melody. The excellent work of Sir William Jones, on oriental poetry, discloses part of the treasures to be found in this language. In general, the Persian literature approaches nearer to the European, in solid good sense, and clearness of thought and expression, than that of any other Asiatic nation ; as the language itself has been long known to bear a strong affinity to the German, though softened by the long usage of a polished people. One of the oldest remains of Persian literature is the famous Sha Nama, or history of kings, a long heroic poem of Ferdusi. Sadi, an excellent and entertaining moralist, writes in prose, mingled with verse, like several of the Icelandic Sagas.

Hafiz is the Anacreon of the east, and his tomb is venerated in the vicinity of Shiraz, being itself the chosen shrine of parties of pleasure, who proceed thither to enjoy the delicious situation, and offer libations of the rich Shirazian wine, to the memory of their favorite bard, a splendid copy of whose works is chained to his monument. But the sciences in general are little cultivated by the Persians, who are lost in abject superstition, and fond believers in astrology ; a proud sophistry, which connects the little brief destiny of man with the vast rotation of innumerable suns and worlds.

The Persian language is known far beyond the limits of Persia Proper. It is spoken at all the Mussulman Courts in India, and is the usual language of judicial proceedings under the British government in Hindostan. It is next in importance to the Arabic and Chinese, in regard to the extent of territory through which it is spoken, being generally understood from Calcutta to Damascus.*

Education.] The education of the modern Persians is chiefly military ; and their gross flatteries, and obliquity of expression, evince that they have totally forgotten the noble system of their ancestors, who in the first place taught their children to speak truth.

Cities.] The capital city of modern Persia is Ispahan. In-

cluding the suburbs, its circuit is computed by Chardin* at about 24 miles, and the inhabitants at 600,000. It stands on the small river Zenderud, which rises in the mountains of Yaibat, three days journey towards the north ; but Abas the Great, at a prodigious expense, pierced some mountains, about 30 leagues from Ispahan, and introduced another stream, so that the Zenderud was as large during the spring, as the Seine at Paris in the winter ; for in that season the melting of the snows, in the high range of mountains, greatly swelled the river. The walls are of earth, and ill repaired, with eight gates, and the streets narrow, devious, and badly paved. But the royal square, and its grand market, the palace of the Sefi, and those of the Grandees, the mosks, the public baths, and other edifices, are for the most part splendid. The suburb of Iulfa, or Yulfa, is very large, and possessed by the Armenians. The environs of Ispahan are pleasant, and, like most other Persian towns and cities, diversified by the neighborhood of mountains. This capital, after the visit of Chardin, was greatly reduced, insomuch that a Persian merchant asserted to Mr. Hanway, that not above 5000 houses were inhabited, having been taken and plundered by the Afgans, in 1722.

The second city, at least in fame, is Shiraz, which has been recently visited and described. This capital of Farsistan, or Persia, is situated in a fertile valley, about 26 miles in length, and 12 in breadth, bounded on all sides by lofty mountains : the circuit of the city is about 4 miles, surrounded with a wall 25 feet high, and 10 thick, with round towers at the distance of 80 paces. The citadel is built of brick ; and before it is a great square, with a park of miserable artillery. The mosk of the late Kerim is splendid but unfinished. The tomb of Hafiz is on the N. E. side, about 2 miles distant from the walls, and at the foot of the mountains, in the same direction, is the tomb of Sadi, with a remarkable channel for water hollowed in the rock. Many summer houses with gardens, in the vicinity of Shiraz, were built by the late regent Kerim, the plantations being avenues of cypress and sycamore, leading to parterres of flowers, and refreshed with fountains. The neighboring fields are fertile in rice, wheat and barley, the harvest beginning in May, and ending in the middle of July. Provisions are cheap, and the mutton excellent. The famous horses of Fars now yield greatly to those of Dush Tistan, a province to the S. W. At Shiraz there is a glass manufactory ; but woollen goods and silks are brought from Yezd and Kerman, copper from Tauriz, sword-blades from Kom. Abu Shehar, or Busheer, supplies Indian articles. The climate of this celebrated city is very pleasant, particularly in the spring, when numerous flowers perfume the air ; and the Boobbul, or oriental nightingale, the goldfinch, linnet, and other warblers, delight the ear.†

Having thus briefly described the two most celebrated cities, the others shall be mentioned in a geographical progress from the north, beginning with those of western Persia. Teffliz, the cap-

* Chardin, tom. iii.

† Franklin, *passim.*

ital of Georgia, is a large and populous town, but meanly built, rising from the river Kur along the side of a hill.* There are fine springs of hot water, a favorite resort of the inhabitants. The chief trade is in furs, sent to Turkey and the south of Persia. The present circuit is about 2 English miles, and it is supposed to contain 20,000 inhabitants, more than half being Armenians.† It must not be forgotten, that during the late confusion in Persia, Georgia has effected at least a temporary independence, supported by Russia; so that the dominion of prince Heraclius is only nominally included within the Persian boundary.

Derbent was formerly a place of noted strength on the Caspian sea, but was taken by Peter the Great of Russia, and afterwards by Catherine II. in 1780. Gmelin visited this city a few years before, and describes it as situated on the side of a mountain, extending almost to the sea. The shores are unfit for anchorage, so that there is little commerce, except inland with Ghilan principally in saffron. The gardens near the town are productive of excellent grapes, and most kinds of European fruits.

Westward on the Turkish frontier, stands the city of Erivan, of considerable extent, and the capital of Persian Armenia, but the houses are meanly built, like most of those in Persia.‡ Provisions are plentiful, and good wine is produced in the neighborhood. After repeated contests with the Turks, the Persians have remained masters of Erivan since 1635. Not far to the S. W. is the celebrated Armenian monastery of the three churches: and the noted mount Ararat, on which Noah's ark rested, which may be regarded as a kind of frontier between the Turkish and Persian dominions, rises about 30 miles to the south of Erivan. The summit is inaccessible.

The province of Aderbijan contains few places of note, except Tebriz, or Tauriz, a considerable city, which was however greatly injured by an earthquake toward the beginning of the last century. The bazars or market places, and other public edifices, are grand and spacious; and it is said that the great square has held 30,000 men drawn up in order of battle. In the neighborhood there are quarries of white marble; and there was a mine of gold, now abandoned; but copper is still wrought. Being situated on the west side of the great Caucasian mass of mountains, on which the snow remains for nine months of the year, the climate is extremely cold, but dry and healthy.

The Caspian provinces of Ghilan and Mazendran present their capitals, Rasht and Sari. The former, though the residence of an independent Khan, has neither walls nor gates, but is the seat of considerable commerce, and the number of houses may amount to 2000. The palace of the Khan was composed of several large pavilions, arranged in the form of a square, and communicating with each other by handsome galleries. In the midst was a garden with fountains, and behind was the haram with another garden, the apartments being richly furnished with tapestry, mirrors,

* Tournefort, ii. 235. † Ellis, Memoir, p. 49. ‡ Tournefort, ii. 255.

and other elegant articles. Rasht is the staple of the silk, which is produced in great abundance in this province. Sari, the residence of the Khans of Mazendran, is of small account, when compared with Aschraff, a favorite residence of Abas the Great ; its splendid palaces and gardens have however become ruinous, since the commotions that followed the death of Nadir.

On returning towards the S. W. there appears Bistan, a small city on the north of the great salt desert, rarely visited by travellers ; and to the W. Chover or Khaver, with a pass of the same name, through a branch of the Caucasian mountains of Mazendran, which is preferred to the passage through the desert. Kom, or Khuins, was visited by Chardin, who in travelling from Sava passed a wide plain, with a hill in the middle, called the mountain of the Talifman. He represents Kom as a considerable city, at the foot of high mountains, and near a river, which is lost in the great salt desert. The houses were computed at 15,000 ; and the chief manufactures were white earthen ware, soap, and sword blades. Here are the superb tombs of Sefi I. and Abas II.

Towards the Turkish frontier, one of the largest rivers of Persia, the Ahwaz, or Ancient Choaspes, flows into the Tigris ; but though the ancient Susa decorated its banks, the modern towns of Kiaab and Ahwaz are of small account.

The celebrated Persian gulph has been always more remarkable for the factories of foreigners, than for native establishments. Bander Abassi was a port opposite to the isle of Ormus, or rather on the coast between Ormus and Kishmish, or Kishma, and is now more commonly known by the name of Gombroon. The trade, once considerable, is now greatly declined ; and even the Dutch left it, and settled in the isle of Karek or Garak. The French Indian commerce has failed ; and the English staple is Bussora.

In the small isle of Ormus, at the entrance of the Persian gulph, was formerly a celebrated mart of Portuguese trade, established there by consent of the petty king of the country, who also possessed some districts on the opposite coast. But the Portuguese were expelled by Abas the Great, with the assistance of the English, A. D. 1622.

The province of Kerman contains a city of the same name ; but some late authors represent Yezd, as the capital, though generally supposed to belong to the province of Fars. This city is celebrated for the manufacture of carpets, and stuffs made of camel hair : but the chief manufactures of carpets are in the fertile vale of Segistan, in eastern Persia.

In passing to the eastern division, or kingdom of Candahar, it may be proper to observe that Cabul, the metropolis, is situated within the limits of Hindostan ; but Candahar is by D'Anville and others ascribed to Persia, being however a city of small size, and chiefly memorable as the grand passage between these extensive empires.

The dominion of Zemaun Shah comprises a considerable portion of Corasan. The city of Herat stands on a spacious plain, in-

tersected with many rivulets, which, with the bridges, villages, and plantations, delight the traveller, fatigued in passing the eastern deserts of Afghanistan, or the country of the Afghans.* It is a smaller city than Candahar, but maintains a respectable trade, and provisions are cheap and abundant. Some European goods pass hither from the gulph of Persia; but coarse strong woollens are manufactured in the adjacent districts. This city was the capital of Corasan, till the first Sefi of Persia transferred this rank to the northern city of Meshid, which contained the tomb of Muza, his supposed ancestor, and one of the twelve great Imams of Persia.

Edifices.] In the recent desolation of the country many of the most splendid edifices are become ruinous, and among others the palace of Ashref in Mazendran. The late Kerim has however decorated Shiraz with many beautiful buildings. He also improved the roads in the vicinity; but in Persia, which may, as Chardin observes, be called a country of mountains, the roads are not only difficult, but kept in bad repair.†

The tombs of the kings of Persia are stupendous works, being cut out of a rock, and highly ornamented with sculptures. The chief of the modern edifices is a pillar, to be seen at Ispahan, 60 feet high, consisting of the skulls of beasts, erected by Shah Abbas, after the suppression of a rebellion. Abbas had vowed to erect such a column of human skulls; but upon the submission of the rebels, he performed his vow by substituting those of brutes, each of the rebels furnishing one.

Manufactures and Commerce.] The manufactures and commerce of this great country may be said to be annihilated, though a few carpets still reach Europe at extravagant prices. Even the trade with the Russians on the Caspian is of small account, consisting of salt and naphtha from Baku, and some silk from Shirvan, called by the Russians Shamakia, but chiefly from Ghilan, where there is a Russian consul at Enseli or Sinsili. The Persian merchants also bring goods to Balfrush, the largest town in Mazendran, where they trade with those of Russia.

That intelligent traveller, Chardin, has given an ample view of the Persian manufactures and commerce in the 17th century. Embroidery was carried to the greatest perfection, in cloth, silk, and leather. Earthen ware was made throughout Persia; but the best at Shiraz, Meshid, Yezd, and particularly beautiful at Zarand, which equalled the Chinese porcelain in fineness and transparency: the fabric was so hard as to produce lasting mortars for grinding various substances.‡ That of Yezd, which Chardin places in Kirman, was noted for its lightness. The manufactures of leather, and shagreen, were also excellent;§ and they excelled in braziery, using the tin of Sumatra to line the vessels.

* Foster, ii. 115.

† The causey of Abas the Great is a noble monument, extending about 500 miles on the S. of the Caspian. Hanway, i. 193.

‡ Chardin, iv. 245.

§ The proper term is *sagria*, from the Persian word Sagri. Chard. iv. 246.

The bows of Persia were the most esteemed of all in the east, and the sabres finely damasked, in a manner which Chardin thinks imitable in Europe ; for, not content with their own mines of steel, they imported it from India, and wrought it in a particular manner described by our author. Their razors, and other works in steel, were also good ; and they excelled in cutting precious stones, and dyeing bright and lasting colors. Their cotton and woollen cloths, and those made of goats' and camels' hair, with their silks, brocades, and velvets, were superior manufactures. The carpets, as already mentioned, were chiefly from the province of Segistan ; and Chardin adds, that in his time, they were called Turkey carpets, because they were brought to Europe through that country ; and were valued by the number of threads in the inch, being sometimes fourteen or fifteen. The stuffs made of camels' hair were chiefly from Kirman, and those of goats' hair from the mountains of Mazendran, but the cotton cloths principally from Hindostan : and the fabric of broadcloth was unknown, and supplied by a kind of felt.

The king himself was engaged in merchandize of silk, brocades, carpets, and jewels ; probably with as little advantage to the country as the royal monopolies in Spain. The standard native merchandize was silk of various qualities. To Hindostan were sent tobacco, preserved fruits, especially dates, wines, horses, porcelain, and leather of different colors. To Turkey, tobacco, and kitchen utensils ; to Russia, manufactured silks. Such were formerly the manufactures and commerce of this extensive country.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, MOUNTAINS, DESERTS, FORESTS, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS, NATURAL CURIOSITIES, ISLES.

Climate.] PERSIA has been said to be a country of three climates ; but even in the south the high mountains contribute to allay the extreme heat. The northern provinces on the Caspian, are comparatively cold and moist ; the exhalations from that sea being arrested by the mountains to the south of Mazendran. In the centre of the kingdom Chardin observes that the winter begins in November, and continues till March, commonly severe, with ice and snow. From March to May high winds are frequent ; but thence to September the air is serene, refreshed by breezes in the night. From September to November the winds again prevail. In the centre and south the air is generally dry, thunder or lightning are uncommon, but hail is

often destructive in the spring. Near the Persian gulf the hot wind called Samiel sometimes suffocates the unwary traveller.

Face of the Country.] Persia may be called a country of mountains ; and where great plains occur they are generally desert. The most remarkable feature of the country is the want of rivers ; in which respect it yields to all the Asiatic regions, save Arabia. Except in the north, and some parts of the western mountains, even trees are uncommon ; and the respect paid by the Persian monarchs to planes, and other trees of diffuse shade, is no matter of surprize. Considered in a general scale, one of the most singular features of the country is its division into two parts by deserts and mountains ; a circumstance which in all ages, as already explained, has greatly influenced its history and destinies.

Soil and Agriculture.] The soil may be regarded as unferile, and even the valleys are sometimes sandy and stony, or of a hard dry clay ; both unproductive, if not well watered. Hence the chief industry of the Persian farmer is employed in watering his lands. These remarks however must be restricted to the central and southern provinces ; for those in the north are sufficiently rich and fertile.

The most common grain of Persia is wheat, which is excellent ; but rice is a more universal aliment, and regarded by the Persians as the most delicious of food.* It is generally produced in the northern or best watered provinces. Barley and millet are also sown. The plow is small, and the ground merely scratched. After which the spade is also used, to form the ground into squares, with ledges or little banks to retain the water. The dung is chiefly human, and that of pigeons mingled with earth, and preserved for two years to abate its heat.

Rivers.] The noble streams of the Euphrates and the Tigris can scarcely at any period be considered as strictly Persian, though Ctesiphon, the capital of the Parthian monarchy, and Seleucia, stood on the latter river. The river of Ahwaz rises in the mountains of Elwend, and pursues a southern course till one branch enters the Tigris above its junction with the Euphrates, while the main stream flows into the estuary of these conjunct rivers. This seems to be the Gyndes of Herodotus, now, according to D'Anville, called the Zeindeh, and by the Turks Karou-Sou, or the black river. The course of this stream, one of the most considerable in Persia, little exceeds 400 miles.

From the range of mountains on the N. E. several rivers of short course fall into the Persian gulph, one of the most considerable being the Rud or Divrud, which joins the mouth of that gulph. The rivers of Mekran are of more considerable course, as the Krenk and Mekshid, which, conjoined, form the river of Mend, so called from a town by which it passes. The Haur and the Araba are of small consequence, except that the latter serves as a nominal boundary towards Hindostan.

In the N. E. the large river of Gihon, better styled Amu, to

* Chardin, iv. 222.

avoid the confused similarity with another large river, the Sihon, rather belongs to Independent Tartary, with its numerous tributary streams; except the Margus or Margab, called also the Mourgab, which however, in the opinion of D'Anville and La Rochette, is rather lost in the sands. To the W. the river of Tedjen or Tedyen, the ancient Ochus, flows into the Caspian; which also receives many small streams from the mountains of Mazendran. D'Anville assigns a very considerable course to the river of Kizil Ozen, or Seesid Rud, which he derives from the mountain of Elwend, not far to the north of Hamadan; so that, by a very winding course to the Caspian, its length doubles what is assigned in more recent maps. This river is the Mardus of antiquity, and must be the Swidura of Gmelin, rising on the confines of Turkey, and falling into the sea below Langorod.* It produces numerous pike, carp, and other kinds of fish, esteemed by the Persians: Gmelin says that it abounds in sturgeons.

Farther to the N. the large river Aras, the ancient Araxes, falls into the Kur or Cyrus, both rising in the Caucasian mountains, and pursuing a very rapid course. The Kur abounds with sturgeon and other large fish; and at its mouth are several isles, liable to be overflowed in the spring.†

The central rivers of Persia remain to be mentioned, most of which are soon lost in sandy deserts, but deserve attention from their historical celebrity. The Zenderud rises in the western chain of Elwend, and passes by Ispahan, beyond which capital its course is soon lost in the sand: this river seems to have been the second Gyndes of the ancients.

But the most important river in this quarter is that which passes between Shiraz and Istakar, or the celebrated ruins of Persepolis, called the Bundamir, and supposed to be an ancient Araxes. This celebrated river flows into a salt lake called Baktegan, and which also receives a considerable stream from the N. E. called the Kuren.‡ Between these two rivers a branch of the mountains of Elwend extends S. E. on the western side of which stand the ruins of Persepolis.

The largest and most remarkable inland river is the Hinmend of the province of Segistan, which rises from two widely separated sources, one in the mountains of Gaur, a part of the Hindoo Koh, and the other far to the S. from the mountains of Gebelabad. These streams join not far to the E. of Bost, whence the river pursues a westerly course, and, according to the account of Otter,§ divides into many branches, which are lost in the central deserts of Persia. Our geographers, on the contrary, suppose that the Hinmend passes by Zarang into the sea of Zereh.

Lakes.] Among the lakes of Persia, the most considerable be-

* Découvertes Russes, ii. 573. See also Hanway, i. 179, and 275, where this river is called Sefetrod. There is a bar at the entrance, but a considerable depth within.

† Gmelin, ib. 236.

‡ This river La Rochette, in his elegant map of the marches of Alexander, supposes was the Medus, and perhaps a Mardus of the ancients.

§ Voyage en Turquie et en Perse. Paris 1748, two vols. 12mo. tome i. 217.

yond all comparison is the Aria Palus of antiquity. This large lake is in the western part of the province of Segistan, and is called in the French maps the lake of Zeré, from a village of that name near its western extremity ; but in the English, the sea of Durra, from another village situated on a river at the distance of twenty miles from the lake, the length is thirty leagues by a day's journey in breadth ; and the water is fresh and full of fish.

The salt lake of Baktegan, about fifty miles East of Shiraz, receives, as already mentioned, the rivers of Kuren and Bundamir. It is represented in the maps as about 40 miles in length, and the breadth about 10 ; but the imperfection of Persian geography affords no farther information.

Far to the N. W. appears the large lake of Urmia, so called from a town near its southern extremity. This lake is represented as about 50 miles in length, by about half the breadth, and is said to be considerably impregnated with salt, and the neighboring mountains were remarkable as the seats of the Assassins. The lake of Erivan, about 120 miles to the N. is about 25 leagues in circumference, with a small isle in the middle : it abounds in carp and trout ; and is the Lychnites of Ptolemy.*

Mountains.] The precise and exact knowledge of mountains, particularly of the direction and extent of the chief ranges, which, with their side branches, often resemble the leading bone of a fish, having been one of the most recent improvements even in European geography ; it cannot be expected that the oriental should aspire to much exactness in this topic, and in the present instance early travellers are unanimous in representing Persia as a plain country, so blind were they to the most striking objects around them.†

The first object, even in a short account of the Persian mountains, must be to trace the direction of the chief chains. It is clear, from the accurate description of Gmelin, that the Caucasian ridge extends to the west of Ghilan and south of Mazendran, till it expire in Corasan, on the S. E. of the Caspian sea.

The southernmost chain of great height is described by Mr. Franklin as running parallel with the Persian gulph N. W. and S. E. at about the distance of 50 miles.

A third range of mountains, of very great height, seems to continue in the same direction with this last, to the S. of the lake of Urmia, where it is connected with the Caucasian ridge. This is the grandest range of mountains in Persia.

A parallel ridge on the W. called by the Turks Aiagh Tag, is supposed to be the Zagros of the ancients, which separated Assyria from Media.‡ This western chain seems to extend to the lake of Van, for mount Ararat is represented as standing solitary in the midst of a wide plain, and from proximity might rather be classed with the range of Caucasus.

Hetzardara, or the thousand mountains, form a branch on the

* Chardin. ii. 222. Tournef. ii. 256.

† See the Persia among the Elzevir Republics, 1638, 12mo.

‡ D'Anville, Anc. Geog. ii. 463.

north of Fars, and one part of it, which gives rise to the river of Ispahan, is called Koh Zerdeh, or the yellow mountain.

The province of Fars is represented by some writers as separated from Kerman by mountains ; but the real barrier is a desert of sand, extending from the S. of the lake of Baktegan, to the proximity of Zarang, and connected with the great desert which divides Persia into two parts. Nor are there any mountains of consequence in the east of Fars. A low range, called Meder, by D'Anville, passes N. E. through the heart of Kerman ; while that country is divided from Mekran by a range in the same direction, called by D'Anville Kofez. Some other nameless ranges cross Mekran in the same direction, that nearest Hindostan being called by Rochette, the Lakhee mountains.

Farther to the N. the mountains of Wulli extend from the neighborhood of Shatzan across to the lake of Vachind, and may thus be considered as forming one range with that on the N. of Mekran, called Gebelabad by La Rochette. This range, however, expires in the great desert to the S. of Zarang.

In the E. of Segistan is a ridge N. and S. called Soliman Koh, or the mountains of Soliman. It is probable that there are mountains of considerable height on the N. and W. of the sea of Zurra ; one of which is called Bershek, and another Ouk, the former being noted for a fire temple, the resort of the Guebers.

Deserts.] The deserts must not be passed in complete silence, though few words may suffice. On the east of Tigris, lat. 33, a considerable desert commences, which is pervaded by the river of Ashwaz, and extends to the N. of Skuster. This desert may be about 140 miles in length, E. to W. and the breadth about 80. It is now chiefly possessed by the wandering tribe of Arabs, called Beni Kiab, a people who, like the desert, are not a little obscure.*

The Great Saline Desert extends from the neighborhood of Kom, to that of the sea of Zurra, in a line from E. to W. of about 400 miles : the breadth from N. to S. may be 250 ; but in the latter quarter it may be said to join with the great desert of Kerman, by the Nauben Dejian, which extends about 350 miles. These two extensive deserts may thus be considered as stretching N. W. and S. E. for a space of about 700 miles, by a medial breadth of about 200 (even not including in the length other 200 miles of the desert of Mekran) ; thus intersecting this wide empire into two nearly equal portions, as before explained. This vast extent is impregnated with nitre and other salts, which taint the neighboring lakes and rivers ; but its natural history has not been investigated with the precision of modern knowledge. In the S. of Mekran, and towards the Indus, are other deserts of great extent.

A third great desert, that of Karakum, or the Black Sand, forms the northern boundary of Corasan and modern Persia ; but the description more properly belongs to Tartary.

Forests.] The Persian forests are unhappily restricted to a few spots in Corasan, the mountains of Mazendran and Ghilan,

* See Niebuhr ; but this tribe seems rather to the S. of the desert.

and those towards Kurdistan. But timber is chiefly supplied by Mazendran, which thence receives a name signifying the land of axes.

Botany.] An accurate account of the indigenous vegetables of Persia yet remains a desideratum in the science of botany : the productions of the eastern and south-eastern provinces are almost wholly unknown to us, and the slight acquaintance that we have with those on the shores of the Caspian, and the frontiers of Russia, is, for the most part, derived from the short and imperfect notices that occur in the travels of Pallas and Gmelin in the neighborhood of the Caspian.

A considerable part of the Persian territory, especially on the side of great Tartary, appears to be occupied by salt deserts ; these are for the most part destitute of trees, and support hardly any plants, except such of the saline succulent kind, as are also found on the sea shore.

Of the high mountains, as far as they have been examined, we are only informed in general, that their vegetable inhabitants are for the most part the same as those observed on the Alps of Switzerland and Italy.

The plants of the hills and cultivated parts adjoining the Caspian sea are better known to us, and from the few whose names we are already in possession of, it is reasonable to infer the presence of many more, that are usually observed to accompany them. On the mountainous ridges are found the cypress, the cedar, and several other kinds of pines, while the lower hills and scars of rock are shaded and adorned with lime trees, oaks, acacias, and chesnuts ; the sumach, whose astringent wood is so essential to the arts of dyeing and tanning, grows here in vast abundance ; and the manna ash tree is scarcely less common. The most esteemed of the cultivated fruits of Europe are truly indigenous in Persia, and have probably hence been diffused over the whole west. These are the fig, the pomegranate, the mulberry, the almond, peach, and apricot. Orange trees also of an enormous size, and apparently wild, are found in the sheltered parts of the mountains ; and the deep warm sand on the shore of the Caspian is peculiarly favorable to the culture of the citron and the liquorice. The vine grows here in great luxuriance, and, farther south, both cotton and sugar are articles of common cultivation. Poplars of unusual size and beauty, and the weeping willow, border the course of the streams, and the marshy tracts abound with a peculiar kind of rush, that forms the material of the fine Persian matting. The ornamental shrubs and herbaceous plants of this country are but little known ; four of them, however, from their abundance and beauty, give an air of elegance to the country, especially in the eyes of an European, superior to that of any other region ; these are the jasmine and the blue and scarlet anemone in the thickets, and the tulip and ranunculus in the pastures.

Zoology.] According to Chardin, the Persian horses are the most beautiful of any in the east ; but in speed they yield to the Arabian, which are less distinguished by elegance of form. The

Persian steeds are rather taller than our saddle horses ; the head small, the legs delicate, and the body well proportioned ; of a mild disposition, very laborious, lively and swift. Tartarian horses are also used, of lower stature, and not so well formed as the Persian, but more capable of enduring fatigue.* Mules are also in considerable request ; and the ass resembles the European, but a breed of this animal is brought from Arabia, which is excellent, the hair being smooth, the head high, while it moves with spirit and agility. The camel is also common, but not admitted into the province of Mazendran, where they eagerly eat the leaves of box, though to them a rank poison. The Persian cattle resemble the European, except towards Hindostan, where they are marked by the hunch on the shoulders. Swine are scarce, save in the N.W. provinces. Of the large tailed sheep, that appendage sometimes weighs more than thirty pounds, enlarging at the bottom, in the form of a heart. The flocks are most numerous in the northern provinces of Erivan, or the Persian part of Armenia and Balk. The few forests contain abundance of deer and antelopes ; while the mountains present wild goats. Hares are common in the numerous wastes. The ferocious animals are chiefly concealed in the forests, as the bear and boar, the lion in the western parts, with the leopard, and according to some accounts, the small, or common tiger. Seals occur on the rocks of the Caspian. The wild ass is found in the central deserts ; but the hyena and chakal belong to the southern provinces. The seas abound with fish of various descriptions ; the Caspian displays sturgeon, and some kindred species, with a fat and delicious kind of carp. Pigeons are particularly numerous ; and the partridges are uncommonly large and excellent. The boolebul, or oriental nightingale, enlivens the spring with his varied song. The Persians have been long accustomed to tame beasts of prey, so as to hunt with leopards, panthers, and ounces.†

Mineralogy.] The mineralogy of this extensive country seems neither various nor important, though the numerous mountains probably abound with unexplored treasures. The lead mines of Kerman and Yezd produce the usual mixture of silver. In the northern provinces there are many mines of iron, but the metal is harsh and brittle. Copper is chiefly found in the mountains of Mazendran, and near Casbin ; but is brittle, and commonly mingled by the melters with a twentieth part of the Japanese or Swedish.

The only precious stone yet discovered seems to be the turkoise, which has indeed almost ceased to be regarded as such, being only bone or ivory tinged with copper. There are two mines of this substance, one at Nishapour, in Corasan, and another about four days journey to the S. of the Caspian, in the mountain called Feruzkoh. Pearls abound, as is well known, in the Persian gulf, especially near the isles of Bahrain on the Arabian side. Some will weigh fifty grains ; but those are esteemed large, which weigh from ten to twelve grains.

* Chardin, iv, 72.

† Ib. iv. 94.

Chardin adds that sulphur and nitre are found in the mountain of Demavend, which he places on the south of Hyrcania, or Mazendran. Sometimes whole deserts are covered with sulphur, and others with salt, which near Cashan is remarkably pure. Rock salt is found near Ispahan; and in the dry climate of Kerman it is even employed in building.

Mineral Waters.] Mineral waters of various descriptions abound in this mountainous country; but they are generally alike neglected by the physicians and the people.

Natural Curiosities.] Among the chief natural curiosities must be named the fountains of naphtha, or pure rock oil, in the neighborhood of Baku, on the western coast of the Caspian, particularly in the adjoining promontory of Ashberon. The land is dry and rocky, and there are several small ancient temples, in one of which, near the altar, a large hollow cane is fixed in the ground, and from the end issues a blue flame, seemingly more pure and gentle than that produced by ardent spirits.* From a horizontal gap in an adjoining rock there also issues a similar flame.

"The earth round this place for above two miles has this surprising property, that, by taking up two or three inches of the surface, and applying a live coal, the part which is so uncovered immediately takes fire, almost before the coal touches the earth: the flame makes the soil hot, but does not consume it, nor affect what is near it with any degree of heat.

"If a cane or tube, even of paper, be set about two inches in the ground, confined and close with the earth below, and the top of it touched with a live coal and blown upon, immediately a flame issues, without hurting either the cane or paper, provided the edges be covered with clay; and this method they use for light in their houses, which have only the earth for the floor: three or four of these lighted canes will boil water in a pot, and thus they dress their victuals. The flame may be extinguished in the same manner as that of spirits of wine. The ground is dry and stony, and the more stony any particular part is, the stronger and clearer is the flame; it smells sulphureous like naphtha, but not very offensive.

"Lime is burnt to great perfection by means of this phenomenon; the flame communicating itself to any distance where the earth is uncovered to receive it. The stones must be laid on one another, and in three days the lime is completed. Near this place brimstone is dug, and naphtha springs are found.

"The chief place for the black or dark grey naphtha, is the small island Wetoy, now uninhabited, except at such times as they take naphtha from thence. The Persians load it in bulk in their wretched vessels, so that sometimes the sea is covered with it for leagues together. When the weather is thick and hazy the springs boil up the higher; and the naphtha often takes fire on the surface of the earth, and runs in a flame into the sea in great quantities, to a distance almost incredible. In clear weather the

springs do not boil up above two or three feet. In boiling over, this oily substance takes so strong a consistency as by degrees almost to close the mouth of the spring; sometimes it is quite closed, and forms hillocks that look as black as pitch; but the spring, which is resisted in one place, breaks out in another. Some of the springs, which have not been long opened, form a mouth of eight or ten feet diameter.

" The people carry the naphtha by troughs into pits or reservoirs, drawing it off from one to another, leaving in the first reservoir the water, or the heavier part, with which it is mixed, when it issues from the spring. It is unpleasant to the smell, and used mostly amongst the poorer sort of the Persians, and other neighboring people, as we use oil in lamps, or to boil their victuals, but it communicates a disagreeable taste. They find it burns best with a small mixture of ashes; and as they procure it in great abundance, every family is well supplied. They keep it at a small distance from their houses in earthen vessels, under ground, to prevent any accident by fire, of which it is extremely susceptible.

" There is also a white naphtha on the peninsula of Apcheron, of a much thinner consistency; but this is found only in small quantities. The Russians drink it both as a cordial and a medicine, and also use it as an external application. Not far from hence are also springs of hot water, which boil up in the same manner as the naphtha, and very thick, being impregnated with a blue clay; but it soon clarifies. Bathing in this warm water is found to strengthen and procure a good appetite."*

The justly celebrated Kämpfer had visited these remarkable springs in the end of the seventeenth century;† and Gmelin, 1773, has added little to the account of Hanway, except that the soil is a coarse marl, mixed with sand, and effervescent with acids. There are many other wells in an adjoining peninsula; and the revenue arising from this uncommon product to the khan of Baku was computed at forty thousand rubles.‡

Isles.] The few Persian isles in the southern gulf, among which the most remarkable are Ormuz, once famous, now abandoned; Kishma; and, towards the other extremity, Karek, from which the Dutch were expelled in 1765, do not merit a particular description in a work of this nature; and far less those in the Caspian sea, the chief of which are on the coast of the Uzbeks.

* Hanway, i. 263, &c. † See his *Amoen. Oxot.* ‡ Dec. des Russes, ii. 210.

INDEPENDENT TARTARY.

CHAPTER I.

GENERAL OBSERVATIONS.

NAME, EXTENT, CHIEF DIVISIONS, PROGRESSIVE GEOGRAPHY, MODERN GEOGRAPHY, CONNEXION WITH LITTLE BUCHARIA, AND REVIEW OF THE ANCIENT AND MODERN GEOGRAPHY OF THAT COUNTRY, RELIGION, POPULATION, AND CHARACTER.

THE descriptions already given in this volume of Asiatic Russia and the Chinese empire, comprise the far greater part of what geographers denominated Tartary, by a vague term applied to a country exceeding all Europe in extent, and possessed by various and distinct nations and races of men.

By repeated victories over the Eluts and Kalmuks of Mongolia, the Chinese dominion has been extended to the mountains of Belur, thus including Little Bucharia; while in the E. Mandshuria remained subject to its sovereigns, who had become emperors of China.

Name.] The title of Independent Tartary becomes however unexceptionable, when confined to the bounds of the present description, for the Uzbeks and Kirguses are of undoubted Tartar origin; and their country must still be regarded as independent of the great neighboring powers, China, Russia, and Persia.

Extent.] The extent of territory possessed by these tribes may be measured from the Caspian sea to the mountains of Belur, a space of not less than 870 miles. From the mountains of Gaur, in the south, to the Russian boundaries, on the north of the desert of Issim, may be near 1500 miles; but of this length a great part is desert.

Divisions.] The chief divisions are the wide stepps or barren plains in the N. held by three hordes of Kirguses, the Great, Middle, and Lesser; with some small Tartaric tribes near the sea of Aral. This portion was anciently called Western Turkistan: the capital being Taraz, on a stream which flows into the Sirr or Sihon, not far above Otrar, and which was also sometimes denominated Turkistan, from the name of the country.

To the S. of the mountains of Argun the land begins to fertilize along the course of the Sirr, Sirt, or Sihon, the Iaxartes of the ancients, also called the river of Shash from the chief territory; and on the banks of its tributary streams, which devolve from the Argun on the N. and the Ak Tau or white mountain on the S. while

* From Pinkerton.

the river itself springs from the mountains of Belur. Ilak and Shash, the most northern provinces on the Sihon, are followed by Fergana, and a district called Orushna, round a town of the same name. Divided from these provinces by deserts and mountains, the kingdom of Kharizm, formerly so powerful as to oppose the great Zingis, has gradually yielded to the encroaching desert.

To the S. of the range of the Ak Tau appears the fertile region of Sogd, the ancient Sogdiana, with its capital Samarcand. On the S. the provinces of Balk, Kilan, Tokarestan, and Gaur, terminate the bounds of Independent Tartary, here separated by deserts on the W. from the Persian province of Corasan. In general, Kharizm on the W. is not considered as a part of Great Bucharia, but this last appellation must be regarded as embracing the whole extent, from the mountains of Argun and sources of the river Ilak, to the confines of Hindostan.

Progressive Geography.] In ancient periods Western Turkistan, and the north of the Caspian, were the seats of the Massagætæ ; to the S. of whom were the Scythians on this side of the Imaus or Belur Tag.

Modern Geography.] As few materials will arise for a description of the present state of Independent Tartary, a country exceeding the German empire in extent, it may not be uninteresting to offer some observations on the modern geography of this country, which, to the disgrace of science, remains in a wretched state of imperfection. The natural and unavoidable connection between the ancient Scythias, on both sides of the Imaus, and in later times between western and eastern Turkistan, Great and Bucharia, will authorize and demand some previous acquaintance with the latter country, though recently subjugated by the Chinese, and briefly included in the description of that empire.

The north-western province of China, called Shen-si, presents a remarkable district, narrow, but of considerable length, extending like a promontory between the great desert on the N. E. and the Eluts of Koko Nor on the S. W. The great wall is here low, and rudely constructed of turf or hardened clay. This tract formerly belonged to the kingdom of Tangut, being a modern addition to China.

Beyond these parts, which are the first approached by the caravans, several rivers, lakes, towns, and stations, are laid down in the maps by the jesuits, as the river Etzine, with the towns of Ouey-yuen and Chao-maing ; and the lakes Sopou and Souhouc. To the W. runs another considerable river, the Polonkir, near which is the city of Sha-cheou, where the river runs into a lake called Hara or Kara Nor, the black lake.

With the southern boundaries and provinces of Little Bucharia we are almost wholly unacquainted ; but the western and northern parts are known with more accuracy from various accounts, and from the maps of D'Anville and Islenieff. To avoid the difficulties of sandy deserts, rendered almost impassable by broken rocks, the caravans proceed to Hami by a circuit to the north ;

where, at the bottom of the mountains of Alak, which afford some protection from the piercing cold, stand the cities and towns of Little Bucharia, in all its features one of the most singular regions in the world.

Towns.] The chief towns, by all accounts, are Cashgar and Yarcand, followed towards the N. E. by Axu or Aksu; Chialish, also called Yulduz, and by the Turks Karashar or the black city; and Turfan. Hami or Camil, with its surrounding villages, is rather considered as a detached province, for some ages under the protection of China.

History.] Little Bucharia was subject to the Kalmuks, who were recently conquered by the Chinese. In more ancient times it was the country of the Seres; but was little known till the time of Zingis, after whose death it became the portion of his son Zagathai. It was considered as a part of Mogulistan, or Mongolia; and the northern provinces belonged to the country of Geté, in which, to the N. E. of Turfan, were the ancient habitations of the Egyurs or Ugurs, a Finnish race who spread dismay throughout Europe in the 10th century, and afterwards settled in Hungary. The late wise and benevolent emperor of China, Kiang Long, or Chen Lung, made repeated visits to Mongolia, in order to overawe the Kalmuks, the most dangerous neighbors of the empire, by the display of superior power. In 1759, he completely vanquished these people, and thus annexed a vast territory to his dominions. Independently of the regions to the north, the extent of Little Bucharia, as it is absurdly named, from the confines of Hami to the mountains of Belur, is more than 1000 miles: and the breadth, from the mountains of Tibet to those of Alak, more than 500.

Religion.] The prevailing religion is the Mahometan, for the Kalmuk conquerors, though they retained their idolatry, were tolerant.

Population, &c.] The population cannot be extensive, and is supposed chiefly to consist of original Bucharians, who are described as of a swarthy complexion, though some be very fair, and of elegant forms. They are said to be polite and benevolent, and their language is probably that called the Zagathian, which is the same with the Turkish, that speech having supplanted their native tongue; for that the chief population is original seems to be allowed, though there be a great mixture of Tartars, or Turcomans, and a few Kalmuks. The dress of the men does not reach below the calf of the leg, with girdles like the Polish. The female raiment is similar, with long ear-rings, like those of Tibet: the hair is also worn in very long tresses, decorated with ribbons. They tinge their nails with henna. Both sexes wear trowsers, with light boots of Russia leather. The head-dress resembles the Turkish. The houses are generally of stone, decorated with some Chinese articles. They are cleanly in their food, which often consists of minced meat; and, like the Russians, they preserve their victuals frozen for a considerable time. Tea is the general drink. The wives are purchased; and the ceremonies of marriage, &c.

differ little from those of other Mahometans, the mullahs or priests having great influence. They have small copper coins ; but weigh gold and silver like the Chinese, with whom they maintained a considerable commerce before the Kalmuk invasion, and which is now probably more productive than ever by their union under the same sovereign. They are not warlike ; but use the lance, sabre, and bow, while the rich have coats of mail. The country is very productive of many kinds of fruits, and particularly wine. They are said to have many mines of gold and silver, but neither the natives nor Kalmuks had sufficient skill to work them : on the melting of the snows abundance of gold is found in the torrents, which they carry to China, and even to Sobolsk in Siberia. Precious stones, and even diamonds, are also found ; and one of the products is musk, probably from the southern mountains near Tibet, in which last country the animal abounds. In contradiction to the usual course of nature, the southern part bordering on the vast Alps of Tibet is colder than the northern, which is protected by the inferior ridge of Aiak. As the dress is chiefly cotton it is probable that the plant abounds in the country.

Such are the chief particularities concerning this interesting country to be collected from the accounts above quoted. Dr. Pallas, in his travels in Russia, gives some idea of Bucharian commerce, in describing the city of Orenburg.* But as he joins the Bucharians with the people of Khiva, he probably implies Greater Bucharia. He seems to mention raw silk as a product of the country, as well as lamb-skins of a remarkably fine kind, and the hair of camels.

CHAPTER II.

DESCRIPTION OF INDEPENDENT TARTARY.

KIRGUSES, STEPP OF ISSIM, HORDS, NUMBER, MANNERS, DRESS, TRADE, HISTORY, KHARIZM, NAME, KHIVA, TRADE, GREAT BUCHARIA, NEPTHALITES, EXTENT AND BOUNDARIES, HISTORY, RELIGION, MANNERS AND CUSTOMS, PROVINCES, CITIES, MANUFACTURES, CLIMATE, RIVERS, LAKES, MOUNTAINS, MINERALOGY, CHARACTER OF THE PEOPLE.

Kirguses.] ABOUT one half of Independent Tartary is occupied by the Kirguses in the north, a people of undoubted Tartaric origin, and the Uzbeks in the south.

Stepp of Issim.] The great stepp, or desert of Issim, divides these Kirguses from Siberia. This stepp is intersected by a river of the same name ; and there are other streams, which either join that river, are lost in the sands, or fall into extensive lakes, for the most part either saline or bitter.† Even the soil is

* Dec. Russ. iii. 123.

† Dec. Russ. iv. 456. Pallas calls it the stepp of Isett.

Impregnated with salt and nitre. This extensive plain must not however be regarded as a mere desert, destitute of all vegetation ; and it is said that many ancient tombs occur in its wide expanse, as well as the Barabinian stepp, between the Irish, and the Orb, which last consists of a tolerable soil, and presents several forests of birch, with the appearance of having been formerly a prodigious saline marsh.

On the west of the Kirguses there still remain some tribes of Kalmuks, though the greater part migrated from the Volga in 1770, when they sought the protection of the Chinese. The Kirguses are supposed to be so called from the founder of their hord ; and have from time immemorial been here classed under three divisions of Great, Middle, and Lesser, though quite unknown to Europe till the Russian conquest of Siberia, some tribes becoming subject to that empire in 1606.* They are considered as faithless, pusillanimous, yet restless ; but the Great Hord, defended by mountains on the S. and E. asserted their independence in repeated contests with the Kalmuks of Soongaria. The Middle and Little Hords have acknowledged the Russian sovereignty since 1731 ; but this subjection is merely nominal, for the Russians are obliged to fortify themselves against these allies. These two hords are each estimated at 30,000 families ; and supposing the Great Hord to contain 60,000, and each family 6 persons, the population of this wide region would amount to 720,000 ; but it probably does not exceed half a million.

Manners, &c.] The Kirguses have gradually moved from the east towards the west. Their manners, common to the Tartars, have been described at considerable length by Pallas.† Their tents are of a kind of felt ; their drink kumiss, made of acidulated mare's milk. The Great Hord is considered as the source of the two others. Being settled near the mountains of Alak, also called Ala Tau, this hord has been called the Alatanian Kirguses.‡ They lead a wandering life, from the borders of the Upper Sirr, or Syrt, near Tashkund, to the stepp of Issim. Each hord has its particular Khan ; but the Middle hord, when Pallas approached this country, was contented with a Saltan, or prince, who seemed to acknowledge the Khan of the Lesser hord : and in 1777, this Khan of the Lesser hord, whose election had been confirmed by Russia, was called Nur Hali, a sensible and equitable prince. Their features are Tartaric, with the flat nose and small eyes ; but not oblique, like those of the Monguls and Chinese. They have horses, camels, cattle, sheep, and goats. It was asserted that some individuals in the Middle hord had 10,000 horses, 300 camels, 3 or 4000 cattle, 20,000 sheep, and more than 2000 goats : while in the Lesser hord, were proprietors of 5000 horses, and a proportional number of the other animals. Their dromedaries furnished a considerable quantity of woolly hair, which was sold to the Russians and Bucharians, being annually clipped like that of sheep. Their chief food is mutton, of the large tailed sort ;

* Tooke, ii. 78.

† Dec. Russ. iii. 375.

‡ Ib. 379.

and so exquisite is the lamb, that it is sent from Orenburg to Petersburg, for the tables of the palace. The lamb skins are the most celebrated after those of Bucharia, being damasked, as it were by clothing the little animal in coarse linen. But the wool of the sheep is coarse, and only used in domestic consumption for felts and thick cloths. The stepps supply them with objects of the chase, wolves, foxes, badgers, antelopes, ermines, weasels, marmots, &c. In the southern and eastern mountains are found wild sheep, the ox of Tibet, which seems to delight in snowy alps ; with chamois, chacals, tigers, and wild asses.*

As the Kirgusians regard each other as brethren, they are obliged to employ slaves, being captives, whom they take in their incursions. Their dress is the common Tartaric, with large trowsers and pointed boots. The ladies ornament their heads with the necks of herons, disposed like horns. They appear to be Mahometans, though rather of a relaxed creed.

Trade.] The Kirgusians carry on some trade with Russia. The chief traffic, which is wholly by exchange, is at Orenburg, but the Middle horde proceed to Omsk. Sheep, to the amount of 150,000, are annually brought to Orenburg ; with horses, cattle, lamb skins, camels wool, and camlets ; sometimes they offer slaves, Persians or Turcomans. In return they take manufactured articles, chiefly clothes and furniture. From Bucharia, Khiva, and Tashkund, they receive arms and coats of mail, which Russia refuses them, in return for camels and cattle. They are extremely fond of the Kalmuk women, who long retain their form and charms ; and often marry them if they will adopt the Mahometan religion. There is an annual festival in honor of the dead. About the beginning of the 17th century this people, who were formerly Shamanians, became children of circumcision, by the exertions of the priests of Turkistan ; but Pallas, in 1769, found them addicted to sorceries and other idle superstitions.

History.] Even this barren region, now inhabited by the Kirguses, has been the scene of considerable events ; and it is not improbable that its numerous deserts and plains may formerly have been more fertile, at least in pasturage. The gradual desiccation, observed in the southern stepps of Siberia, may warrant the conclusion that the hills and plains, on the north of the Caspian and Aral, anciently presented more numerous streams and richer verdure. However this be, these regions have been held by successive nations of high repute, from the Massagetae of early times to the Turks. These last imparted the name of Turkistan, having migrated from their habitations near the mountains of Bogdo, adjoining to those of Altai. In the 6th century these Turks had already spread to the Caspian ; while the Eygurs seem to have succeeded them in their original seats. They soon after subdued the people of Sogdiana, and the Nepthalites of Great Bucharia, called in that ignorant age White Huns. As the Turks founded their first western settlements in the regions now held by the

* Dec. Russ. iii. 396.

Kirguses, they thence received the name of Turkistan. From this centre of their power issued those Turkish armies, which have changed the destinies of so many nations. Little Bucharia was called Eastern Turkistan, from a similar cause ; but appears to have been first subdued by the Turks of Cathay, on the N. W. of China. The Turks and Huns may be considered as one and the same Tartaric race, totally unknown to Europeans till the appearance of the latter, who first passed the stepps, deserts, and mountains which had concealed them from classical observation, till the fourth century. The Huns, who appeared about A. D. 375, by their peculiar features impressed the writers of the time, as a new and unknown race, having seemingly passed in one course of depredation from Asia to Europe ; while the Gothic and Slavonic nations had left many of their settlements vacant, in their progress into the Roman empire. But the Turks, though originally the same people, perhaps warned by the fate of their brethren, made a slow and gradual progress ; and appear to have been mingled by marriages and conquests with the Slavonic and Gothic tribes, on the N. and E. of the Caspian. Such was the origin of the name of Turkistan ; from which the Turks spread desolation over the most beautiful countries of the east, and even threatened the liberties of Europe.

Kharism.] Before proceeding to Great Bucharia, it may be proper briefly to describe the country of Kharism, which extends from the Gihon, or Amu, to the Caspian sea, bounded on the N. and S. by wide deserts, the chief town being now Khiva, but anciently Urgenz. This country is about 350 miles in length and breadth, and in the time of Zingis was a powerful kingdom, but at that time included Corasan, and a part of Great Bucharia.

At present this state is almost restricted to the district of Khiva, the circuit of which may be performed on horseback in three days ; but there are five walled cities, or rather towns, within half a day's journey of each other.* "The khan is absolute, and entirely independent of any other power, except the Mulla Bashi, or high priest, by whom he is controlled. The Kievinski Tartars differ very little from the Kirguses ; but surpass them in cunning and treachery. Their manners are the same, only that the Kirguses live in tents, whilst the others inhabit cities and villages. Their only trade is with Bokhara and Persia, whither they carry cattle, furs, and hides, all which they have from the Kirguses and Turkoman Tartars, who often prove very troublesome neighbors to them. The place itself produces little more than cotton, lamb furs of a very mean quality, and a small quantity of raw silk, some of which they manufacture."† The same author informs us that the town of Khiva stands on a rising ground, with three gates, and a strong wall of earth, very thick, and much higher than the houses : there are turrets at small distances, and a broad deep ditch full of water. It occupies a considerable space, and com-

* Hanway, i. 241.

† Ibid.

mands a pleasant prospect of the adjacent plains, which the industry of the inhabitants has rendered very fertile; but the houses are low, mostly built with mud, the roofs flat, and covered with earth.

Khiva is said to stand at the distance of seventeen days from the Caspian sea, and from Orenburg thirty-three, computing the day's journey forty versts.* In 1739, the khan of Khiva assembled an army of 20,000, to oppose Nadir; but the city surrendered at discretion.

Pallas informs us that the people of Khiva bring to Orenburg considerable quantities of raw cotton.† But the coasts of the Caspian are held by some remains of Turkomans in the north, and by Uzbeks in the south. The bay of Balkan is visited by Russian vessels: the isles yield rice and cotton, and one of them, Napthonia, a considerable quantity of naphtha, the bed seeming thus to pass the sea from Baku, in a S. E. direction; but they are inhabited by Turkoman pirates. A more considerable trade is maintained with Mangushlak, which our maps represent as standing at the egress of the river Tedjen; but, according to the learned Wahl, that river, and another which flows by Meshid, are received by an inland lake, the Kamysh Teshen, on the S. of the bay of Balkan; a circumstance which seems to be confirmed by the chart of the Caspian, published by Hanway, in which the mouth of the Tedjen does not appear.‡ To the N. of the large bay of Balkan are the lake of Karabogas, and another inlet, which is followed by the port of Alexander, or Iskander.

As the merchants of Khiva brought gold and gems to Astrakan, probably from the two Bucharias, an idea was suggested to Peter the Great, that these precious products were found in Kharism, and he in consequence attempted a settlement. But the Russians, to the number of 3000, advancing under the command of a Circassian prince, called Beckawitz, towards Khiva, were all cut off by the Uzbeks.

The history of Kharism has been ably illustrated by its king, or khan, Abulgazi, in his general history of the Tartars, written about 1660. He was born in 1605, and elected khan, 1643, after a long imprisonment in Persia. He died in 1663, revered as an excellent prince, and a man endowed with the rarest qualities.

Great Bucharia.] By far the most important part of Independent Tartary is comprised under the name of Great Bucharia, generally supposed to have originated from the city of Bokhara, the first which the Persian merchants entered on visiting the country. It is part of the Touran of the ancient Persians, and was chiefly known to the Greeks and Romans by the names of Sogdiana and Bactriana; the former being the Maweralnahar, or country beyond

* Equal, by Hanway's account, to 27 miles: hence the distance of Khiva from the Caspian would be 459 miles, while our maps scarcely allow 300.

† Dec. Russ. iii. 123.

‡ Wahl, probably after D'Anville, places Mangushlak far to the north, near the Dead Gulf, in the country of the Mankats, called Karakalpaks, by the Russians. The map of Russia, 1787, gives the gulf of Mangushlak on the north of cape Kalagan. Colonel Bruce can deserve no credit in opposition to all the Russian accounts.

the river, of oriental geography ; while Bactriana corresponds with Balk. From the second son of Zingis, it received the name of Zagathai. By the Byzantine historians, the people are called Ephthalites, or corruptly, Nepthalites, a name derived from the Oxus, or Amu, by the Persians styled Abtelah, or the river of gold. Those Byzantine writers, who affect to imitate classical language, call the Ephthalites, White Huns.

Extent and Boundaries.] Great Bucharia extends more than 700 miles in length, from N. to S. by a medial breadth, if Fergana be included, of about 350, thus rather exceeding Great Britain in size, but much inferior to the country called Little Bucharia. The northern boundary appears to be the mountains of Argun. On the western side a desert, the river Amu, and other deserts, divide Bucharia from Kharism, and Corasan : while on the S. and E. the mountains of Gaur, or Paropamisus, the Hindoo Koh, and the chain of Belur, are perpetual barriers.

History.] The original population of this country was Scythian, like that of Persia. Its history might be traced from the earliest periods, as the seat and source of the most ancient Persian monarchy. This region became better known, by the expedition of Alexander, and the establishment of the Greek monarchy of Bactriana. But it is not till after the Mahometan conquest of Persia, in the 7th century, that the history of this country becomes sufficiently clear. In 1494, Sultan Baber, a descendant of Timur, was, with his Monguls, expelled from Great Bucharia ; and proceeding into Hindostan, there founded the Mogul power. The Tartarian victors, called Uzbeks, established a powerful monarchy in Bucharia ; and successive khans held the sceptre from 1494 to 1658, soon after which period this great and fertile country appears to have been divided into several dominations, under numerous khans. In 1741, the city of Bokhara, with a small territory around it, constituted all the monarchy of one of these khans.* Nadir first distinguished himself in Corasan, in combats with the Uzbeks. The province of Gaur, is subject to the kings of Candahar ; but Balk and Samarcand appear to remain subject to their own Uzbek khans. In the deficiency of recent accounts, it can only be conjectured, that the chief powers of this country are the khan of Balk in the S. and of Samarcand in the N.

Religion.] The religion of the Uzbeks and Bucharians is the Mahometan, of the Sunni sect, and the government of the khans is despotic. There is no precise evidence of the state of the population, which consists of the Tartars and of the Bucharians. It is probable, that upon an emergency, an army might be mustered of 100,000 ; but though Nadir reduced Bokhara and Khiva, he seems to have respected Balk and Samarcand, considering them as allied states, which furnished him with the best troops in his army : and he even regarded himself as a Tartar, not as a Persian. There is no statement of the revenue of these fertile provinces. From an account published by Hanway of the revenues of

* Hanway, i. 242.

Nadir, it appears that Corasan yielded half a million sterling annually, being equal to that of Eriwan, and superior to any other Persian province. It is probable that the revenue of Great Bucharia is at least equal to that of Corasan.

Manners and Customs.] The manners and customs of the Uzbeks are similar to those of the other Tartars : but they are supposed to be the most spirited and industrious of these barbarians. Though many reside in tents in the summer, yet in winter they inhabit the towns and villages. They are, however, addicted to make sudden inroads into the Persian provinces. Those of Balk are the most civilized, and carry on a considerable trade with Persia and Hindostan. The native Bucharians, or Tadjiks, are comparatively fair ; and correspond, in elegance of form and features, with those of Little Bucharia, whom they also resemble in the mode of dress. The Bucharians never bear arms. The Uzbeks, on the contrary, are no strangers to the use of the musket ; and it is said that even their women, who surpass those of the other Tartars in beauty, are not averse to warfare, but will sometimes attend their husbands to the field. The language is Zagathaian, that is, Turkish, or Turkomanic ; but that of the Bucharians has never been investigated, though it be probably Persian, like their physiognomy, but intermingled with Turkish, Mongolian, and even Hindoo terms. The literature of Great Bucharia would furnish an ample theme, Samarcand having been a celebrated school of oriental science, cultivated even by monarchs, as Ulug Beg, and others : it was still, in the beginning of last century, the most celebrated of Mahometan universities.*

Provinces.] The cities in Great Bucharia generally give name to the provinces, or receive their appellations from them. In the north the province of Fergana appears to be subject to the Kirguses of the Greater Hord ; and of Andegan, its capital, there is no recent account. The other chief provinces are the western part of Shash, and a district called by D'Anville Ofrushna, from a town of the same name.† The most fertile and celebrated province is that of Sogd, so called from the river which pervades it. Next are Vash, Kotlan, and Kilan. Tokarestan and Gaur are the most southern provinces.

Cities.] The chief city of Great Bucharia is Samarcand, on the southern bank of the river Sogd, which, at the distance of above a hundred miles, after washing the walls of Bokhara, passes through a considerable lake, and is supposed to join the Oxus, or Amu.

Of this celebrated capital there is no recent account, but it seems greatly to have declined since the time of Timur, the festivities of whose court at his palace here, and villas in the vicinity, have been so well described by his Persian historian. Towards the beginning of the last century, Bentink says that Samarcand was fortified with ramparts of turf, the houses being mostly of

* Bentink on Abulgazi, p. 279.

† The Setrushteh of Ebn Haukal, p. 261.

hardened clay, though some were of stone, from quarries in the neighborhood. The khan of Great Bucharia commonly encamped in the adjacent meadows, the castle being almost ruinous. The excellence of the paper made of silk, recommended it to all the countries of the east : and it is supposed that this invention is derived from Samarcand.* The rich vale of Sogd produced such abundance of exquisite grapes, melons, pears, and apples, that they were sent to Persia, and even to Hindostan.

Bokhara, on the same river, has repeatedly contested the metropolitan dignity with Samarcand. When visited by the English agents in 1741, it was a large and populous city, subject to its khan ; standing on a rising ground, with a slender wall of earth ; the houses of clay, but the numerous mosques of brick.† The citizens manufactured soap and calico ; and the chief products were cotton, rice and cattle. From the Kalmuks they received rhubarb and musk ; and from Badakshan, the capital of a country so called, they used to receive lapis lazuli, and other precious stones ; that city being computed at sixteen day's journey from Bokhara. There was gold and copper coin : and after Nadir took this city, the Persian and Indian silver became common. In the tenth century it was distinguished by the manufacture of fine linen.

Balk is a distinguished city on the river Dehash, which flows into the Amu from the southern mountains of Gaur, or Paropamisus, probably, as in the beginning of the last century, still subject to its particular khan of the Uzbeks ; being then the most considerable of all their cities, large and populous, with houses of brick or stone ; while the castle or palace consisted almost entirely of marble from the neighboring mountains. This beautiful city was an object of ambition to the neighboring powers of Persia and Hindostan ; but was secure, not only from their mutual jealousy, but from the difficult access through high mountains on one side, and deserts on the other. The people were the most civilized of all the Tartars, and beautiful silks were prepared from the product of the country, which seems then to have included the whole of Great Bucharia to the S. of the Amu, which in this part of its course is also called the Harrat. It is the chief seat of the trade between Bucharia and Hindostan.

Zouf, which is also called Gaur, from the province of which it is the capital, is said to be now subject to the kingdom of Candahar, and Bamian, in the same province, must have shared the same fate. The latter city was remarkable for numerous images, and other monuments, carved in the adjacent mountains. Andrab is the chief city of Tokarestan ; near a pass through the mountains of Hindoo Koh, strictly guarded by the khan of Balk. In the neighborhood of this city were rich quarries of lapis lazuli, a

* This manufacture is said to have been known A. D. 650. Onseley's *Ebn Haukal*, p. 300. The same work may be consulted for the state of this great city in the tenth century.

† Hanway, i. 242.

substance with which Great Bucharia seems chiefly to have supplied the ancient and modern world.

Not far to the north stands Badakshan, on the river Amu, or Harrat. In the last century this city belonged to the khan of Great Bucharia, or rather of Samarcand ; and being secluded in a branch of the Belur alps, was used as a state prison for rivals or insurgents. Badakshan was small, but well built and populous ; and its inhabitants were enriched by the gold, silver, and rubies, found in the neighborhood ; the grains of gold and silver abounding in the torrents which descend from the mountains, when the snow melts in the beginning of summer.* Several caravans for Little Bucharia and China pass by this city.

Kotlan, or Khotlan, is the capital of a province so called, but otherwise seems little memorable. Termed, situated on the Amu, is scarcely known in modern accounts : and in general the northern cities seem greatly to have declined under the domination of Uzbeks.

Manufactures.] The chief manufactures have been already mentioned in the account of the cities. Besides the caravans to Persia, Hindostan, and China, some trade is carried on with the Russians, the Bucharian merchants not only furnishing their own products, but others from the eastern countries to which they trade.

Climate.] The climate in general appears to be excellent, the heat even of the southern provinces being tempered by the high mountains capped with perpetual snow ; and though situated in the parallel of Spain, Greece, and Asiatic Turkey, the proximity of the Siberian deserts, and the lofty Alps, render the summer more temperate. The face of the country presents a great variety ; but though there are numerous rivers, hills, and mountains, there seems to be a deficiency of wood.† Near the rivers the soil is very productive, so that the grass sometimes exceeds the height of a man ; and in some parts considerable industry is shewn in the cultivation of rice and other grain. In any other hands but those of the Tartars, this country might rival any European region.

Rivers.] The chief rivers of Independent Tartary are the Amu and the Sirr, or river of Shash. The former is the ancient Oxus, and near its source is called the Harrat : oriental geographers also term it the Gihoon, as they call the Sir the Sihoon.

The Amu rises in the mountains of Belur, more than 200 miles N. E. from Badakshan, and before it reach that city has already received the Ortong from the E. From Badakshan it passes W. to Termed after receiving numerous streams from the Ak Tau on the N. and from the Hindoo Koh on the S. After being joined from the same quarter by the Dehash, or river of Balk, with collected streams from the mountains of Gaur, the Amu follows a N. W. direction, and falls into the sea of Aral, which appears, as before mentioned, to have been in all ages its chief receptacle,

* Bentink on Abulgazi, p. 55.

† It is probable there may be large forests on the western side of the Belur, as Bentink, p. 258, says that timber abounds.

though a branch formerly passed by Urghenz towards the Caspian, and another seems to have been detached near Hazarasp. The whole course of this noble river surpasses that of the Tigris, being probably not less than 900 miles. It abounds with fish of various sorts.

The Sirr, or river of Shash, also rises in the mountains of Belur, and falls into the eastern side of the sea of Aral, after a course of about 550 miles. According to Islenieff the furthest source of the Sirr is the river Narin, which rises to the S. of the lake Tuzkul in the chain of Alak, near its junction with the Belur alps ; and by the account of Pallas the source is near that of the river Talas. The Narin itself consists of numerous streams collected from the ridges of Alak and Argun, bending to the S. while the other rivers in this quarter flow in a north direction ; but the Sirr, peculiarly so called, rises in the mountains of Terek Daban, or northern part of the Belur chain, where it joins that of Alak. After passing Andegan and Cojend, the Sirr or Iaxartes runs N. W. by Tashkund and Tuncat, where it is joined by a considerable river from the E. At Otrar it receives the river Taraz. The remaining course of the Sirr is chiefly through the desert of Burzuk ; and it is doubtful if it be joined by the Sarasu, a large river from the N. so imperfect is the geography of these regions.

In the country possessed by the three Hords of Kirguses are also other considerable streams, as the Dzui, which rises on the N. of the lake Tuzkul ; and the Irghiz and Turgai, which flow into a lake on the N. of the Aral ; not to mention the Issimi, pervading the stepp of the same name. Several of these lakes and rivers, now obscure, are remarkable in the history of Zingis and his successors, when, directing their conquests to the N. of the Caspian, they subdued the greater part of European Russia.

Lakes.] The most considerable lake is the sea of Aral, or of eagles, already mentioned in the general view of Asia. The lake Tengis, Balcash, or Palkati, is near 140 miles in length, by half that breadth, being the largest lake in Asia, after the seas of Aral and Baikal ; but this, with two other very considerable lakes to the E. properly belong to the Kalmuks subject to China. The lakes in the country of the Kirguses and in Great and Little Bucharia are of less moment.

Mountains.] The principal range of mountains is that of Belur, which, according to all accounts, is a great alpine chain, covered with perpetual snow. The chief branches proceed towards the W. for on the E. is the high central plain of Asia, full of deserts, as if nature had here performed her earliest operations, when this first and greatest continent emerged from the primeval waters. Of this extensive table-land the Belur may be regarded as the western buttress, continued by the mountains of Jimbal and Kisik Tag to the Altaian chain, which forms the northern buttress on the S. of the sea of Baikal. On the E. this plain gradually declines from the sources of the Onon and Kerlon, and the S. limit of the desert of Shamo, while the numerous alps of Tibet, to which country there is a gradual ascent from China, form the

southern and excrescent buttress. Except in some few places, sheltered from the N. and E. this extensive elevation is exposed to extreme cold, the reverse of the deserts of Africa. It is intersected with great ranges of mountains, whose height must be enormous superadded to that of the bases ; the western parts in particular, between Siberia and Tibet, abound with irregular ridges of naked rocks, presenting as it were the ruins of mountains.

The chain of Belur, the ancient Imaus, proceeds nearly N. and S. and is continued by the mountain of Alak or Alak Oola on the N. of Little Bucharia, which join the great Bogdo, the highest mountain in central Asia, according to the reports of the Monguls and Tartars. On the S. the Belur seems more intimately connected with the Hindoo Koh than with the northern ridges of Tibet. The Hindoo Koh, and mountains of Gaur, must not be forgotten among those of Great Bucharia, being seemingly an extension of the chain of Belur, without any interruption, except a narrow pass to the S. of Anderab. The mountains of Argjun or Argun seem to form one chain with the Kara Tau, though broken, as is not unusual, by the transition of a river ; and like the Ak Tau in the S. appear a branch detached from the Belur.

Mineralogy.] Neither the botany nor zoology of this country have been explored by any intelligent naturalist. We have seen that the alpine regions present many of the animals of Tibet. The mineralogy is not so obscure, though the Monguls and Tartars, who may be said to have possessed this country for a thousand years, have not industry for the proper pursuit of metallurgy. The alpine heights in the S. E. contain gold, silver, and a peculiar production, the balay, or pale rose-colored ruby ; not to mention lapis lazuli. In the 10th century, before the native industry had expired under long oppression, Fergana produced sal ammoniac, vitriol, iron, copper,* gold, and turkoises : and quicksilver is added, a rare and valuable product. In the mountain of Zarka there were springs of naphtha and bitumen, and "a stone that takes fire and burns," which must imply coal. In the country of Setrushteh, D'Anville's Ofrushna, there was a cavern, whence a vapor arose, which in the night seemed fiery, and from which sal ammoniac was procured. On digging the ground a similar vapor would arise, as we are told of the fires near Baku. In the mountains of Ailak or Ilak, the most northern province around Otrar, there were mines of gold and silver. The venerable father of Arabian geography, Ebn Haukal, has compensated for the penury of his information respecting natural history, by an animated character of this country and its people, which may be here introduced as a relief from the dryness of some of the details, unavoidable in describing a country highly celebrated, but the geography of which unaccountably remains the most defective of any in Asia, with the single exception of interior Arabia.

" Such are the generosity and liberality of the inhabitants, that

* Ebn Haukal.

no one turns aside from the rights of hospitality ; so that a person contemplating them in this light, would imagine *that all the families of the land were but one house.* When a traveller arrives there every person endeavors to attract him to himself, that he may have opportunities of performing kind offices for the stranger : and the best proof of their hospitable and generous disposition is, that every peasant, though possessing but a bare sufficiency, allots a portion of his cottage for the reception of a guest. On the arrival of a stranger they contend one with another for the pleasure of taking him to their home, and entertaining him. Thus, in acts of hospitality, they expend their incomes. I happened once to be in Soghd, and there I saw a certain palace, or great building, the doors of which were fastened back with nails against the walls. I asked the reason of this, and they informed me that it was an hundred years and more since those doors had been shut, all that time they had continued open day and night, strangers might arrive there at the most unseasonable hours, or in any numbers, for the master of the house had provided every thing necessary both for the men and for their beasts ; and he appeared with a delighted and joyful countenance when the guests tarried awhile.

" In all the regions of the earth there is not a more flourishing or a more delightful country than this, especially the district of Bokhara. If a person stand on the Kohendiz (or ancient castle) of Bokhara, and cast his eyes around, he shall not see any thing but beautiful and luxuriant verdure on every side of the country ; so that he would imagine the green of the earth and the azure of the heavens were united : and as there are green fields in every quarter, so there are villas interspersed among the green fields.

" The walls and buildings, and cultivated plains of Bokhara, extend above 13 farsang, by 12 farsang ; and the Soghd, for 8 days journey, is all delightful country, affording fine prospects, and full of gardens, and orchards, and villages, corn fields, and villas, and running streams, reservoirs, and fountains, both on the right hand and on the left. You pass from corn fields into rich meadows and pasture lands ; and the fruits of Soghd are the finest in the world."*

* Ebn Haukal, by Sir Wm. Ouseley, p. 234.

ARABIA.

CHAPTER I.

HISTORICAL GEOGRAPHY.

EXTENT, BOUNDARIES, NAME, DIVISIONS, ORIGINAL POPULATION, PROGRESSIVE GEOGRAPHY, HISTORICAL EPOCHS, RELIGION, GOVERNMENT, MANNERS AND CUSTOMS, DRESS, LANGUAGE, LITERATURE, CITIES AND TOWNS, EDIFICES, MANUFACTURES, PRODUCTS, COMMERCE.

Extent.] ARABIA, taken in its largest extent, lies between lat. 12° 30' and 31° 30' N. and lon 34° 14' and 59° 14' E. and forms one of the largest peninsulas in the world.

Boundaries.] It is bounded on the E. by the Euphrates, the Persian gulf, and the bay of Ormus ; on the W. by Palestine, part of Syria, the isthmus of Suez, and the Red Sea ; on the S. by the straits of Babelmandel, and the Indian ocean ; and on the N. by part of Syria, Diarbekir, Irak and Khuzestan. Its northern limits, however, are less strongly marked, than the others ; but in both ancient and modern times they rise to an angle about an 100 miles to the E. of Palmyra, which is not included in Arabia. Thence the line proceeds S. W. to the S. E. angle of the Mediterranean, a northern boundary of Arabia Petræa. Moses, however, with a geographical accuracy that defies the severity of criticism, determines the boundaries of this kingdom, when he tells us, that on the south it reached to the sea of Suph or Red Sea ; on the W. to Paran and Tophel ; on the N. to Laban, Hatseroth, and Di-Zahab, that is, to the borders of Syria ; and on the E. to Kadesh-Barnea, about 11 days journey from mount Horeb.

From the cape of Babelmandel to the extreme angle on the Euphrates, the length is not less than 1800 miles ; while the medial breadth is about 800 ; containing about 1,440,000 square miles.

Name.] The revolutions of time have produced no change in its primitive denomination ; since even in the ages bordering on the deluge it was known by the name of *Arabah*. By the Syrians, and many of the orientals, it was called *Arabistan* ; and in the scriptures it is sometimes denominated the *land of Cush* : Moses himself styles the western Arabia, *Arabah*, which affords a strong presumption that its original name was derived from a Hebrew word signifying the *west* ; and when the Ishmaelites, who possessed it, gradually reduced the adjacent parts, they carried with them the appellation of *Arabah*, and applied it to the whole peninsula : the first part of the peninsula of the Arabs was divided into *Kedem* and *Arabah*, as we learn from scripture.

Divisions.] The best eastern writers have divided this peninsula into five provinces or kingdoms, viz. Yaman, Hejaz, Tehema,

Naid and Yamama. It was divided by Ptolemy into Arabia Petraea, Arabia Deserta, and Arabia Felix ; and since his time this division has generally prevailed : Arabia is divided by the inhabitants themselves into eight provinces, entirely independent on one another, viz. Yemen, on the S. towards the straits of Babel-mandel, Hadramant, on the shores of the Indian ocean, Omam, on the S. of the entrance of the Persian gulf, Hadsjar or Hajar, Ned-sied or Neged, and Hedjas or Hejaz. The territory of the Bedouins, or of the Arabs in the desert of Syria, may be reckoned a seventh province, and to this again may be added the Arabian establishments on the southern coast of Persia.*

Original Population.] The population is original and indigenous, the Arabians being the same race with the Assyrians of remote antiquity, the probable fathers of the Syrians, Egyptians, and Abyssinians, whose languages are intimately allied, as is that of the Hebrews ; being totally different in form and structure, from that of the Persians, their powerful neighbors in the E. By all accounts, sacred and profane, the Assyrians were the most ancient civilized and commercial people ; and when modern philosophy is divested of its prejudices, there will be no reason to infer superior pretensions from China, and far less from Hindostan. Situated in a country nearly central, between Asia, Africa, and Europe ; and in the wide intercourse of the Mediterranean, and the Arabian and Persian gulfs ; it was natural that the variety of productions and wants should occasion the first rise of commerce in Syria ; and the merchants of Tyre had explored the shores of Britain, while the Chinese seem not to have discovered those of Japan. This early civilization will excite the less surprise, when it is considered that even the modern Arabians are a most sagacious and intelligent race of men, remarkable also for spirit and valor, whose country alone has never been subdued by any invader, and who alone, of all Asiatic nations, have preserved the sacred flame of freedom, which their progenitors kindled in their inaccessible mountains. In comparatively modern times they have vindicated the fame of their ancient pre-eminence by giving religion and laws to half of Asia and Africa, and a great part of Europe. The Arabian califs in Spain, Africa, and Egypt, as well as at Bagdad, cultivated the arts and sciences ; and shewed a great superiority to the barbarous powers of Europe at that period. From Samarcand to the centre of Africa, the Arabian language and manners are held in veneration.

Progressive Geography.] This distinguished country is known in the earliest records of history and geography ; and being celebrated for products, which could only be procured by navigation, must have been no stranger to mercantile enterprize on its furthest shores towards the Indian ocean. Strabo, and even Eratosthenes, appear to have known the southern coasts, though not so distinctly as those on the east of the Arabian gulf. Ptolemy's description of Arabia evinces a considerable portion of accurate

* Rees' Cyclopedia, article Arabia.

knowledge ; and of the interior parts, as well as those of Africa, he probably, from his residence and opportunities in Egypt, had acquired a knowledge far superior to any possessed at the present moment. He has however greatly diminished the length of the Arabian gulf ; and by increasing the size of the Persian has considerably injured the just form of the country. Some of these errors have been rectified by the later Arabian geographers, and our knowledge of the interior of the country has received considerable additions from the same authors. Yet even the just geography of the shores is recent, and has been improved since the time of D'Anville. Niebuhr, to whom we are indebted for the best account of this country, penetrated but a little way into the interior ; and many discoveries here remain for the enterprizing traveller : but the passage is extremely difficult, the country being divided among a surprising number of Imams and Sheiks, who often carry on petty wars, and plunder all strangers that fall into their hands.

Historical Epochs.] The present Arabians, according to their own historians, are sprung from two stocks. Kahtan or Joktan, the son of Eber and Adnan, descended in a direct line from Ishmael, the son of Abraham and Hagar, of whose posterity it was foretold, that they shall be invincible, "have their hands against every man, and every man's hands against theirs." They are at present, and have remained from the remotest ages, during the various conquests of the Greeks, Romans and Tartars, a convincing proof of the divinity of this prediction. According to prophecy they still "dwell in the presence of their brethren."

Sometime after the confusion of tongues at Babel, or above 3600 years ago, Yarab, the elder of Joktan's sons, succeeded his father in the kingdom of Yemen ; and Jorham, the younger, founded the kingdom of Hejaz, where his posterity possessed the throne, till the time of Ishmael. The former kingdom lasted, according to Abulfeda, 2020 years ; or as other Arabian writers say, above 3000.

The first great calamity that befel the tribes settled in Yemen, was the inundation of Aram, which is said to have happened soon after the time of Alexander the Great. On this occasion, eight tribes were forced to abandon their dwellings ; and some of them in their migration gave rise to the two kingdoms of Ghassan and Hira ; both of them out of the proper limits of Arabia. The founders of the former maintained their kingdom, according to Abulfeda, 616 years : five of these princes were named Hareth, written by the Greeks Aretas ; and it was the governor of one of these, who ordered the gates of Damascus to be watched, for the purpose of apprehending the apostle Paul.

Jorham, the son of Kahtan, who founded the kingdom of Hejaz, and his posterity, remained in possession of it, till the time of Ishmael. Arabia never appears to have been united, either in a republic or under one monarch, except in the time of Mahomet and his successors. The Romans made several incursions into

Arabia, but neither they nor any other foreign power were ever able to subdue it.

We think it proper to subjoin to this article, the following sketch of Mahomet, as casting light on the history and religion of this country.

Mahomet was born in the 6th century, A. D. 569, in the reign of Justinian II. emperor of Constantinople. Though descended of a mean parentage, illiterate and poor, Mahomet was endowed with a subtle genius, like those of the same country, and possessed a degree of enterprize and ambition peculiar to himself, and much beyond his condition. He had been employed, in the early part of his life, by an uncle, Abuteleb, as a factor, and had occasion, in this capacity, to travel into Syria, Palestine and Egypt. He was afterwards taken into the service of a rich merchant, upon whose death he married his widow, Cadiga, and by her means came to be possessed of great wealth, and of a numerous family. During his peregrinations into Egypt and the East, he had observed the vast variety of sects in religion, whose hatred against each other was strong and inveterate, while at the same time there were many particulars in which the greater part of them were agreed. He carefully laid hold of these particulars, by means of which, and by addressing himself to the love of power, riches and pleasure, passions universal among them, he expected to raise a new system of religion, more general than any which hitherto had been established. In this design he was assisted by a Sergian monk, whose libertine disposition had made him forsake his cloister and profession, and engage in the service of Cadiga, with whom he remained as a domestic when Mahomet was taken to her bed. This monk was perfectly qualified by his great learning, for supplying the defects which his master, for want of a liberal education, labored under, and which, in all probability, must have obstructed the execution of his design. It was necessary, however, that the religion they proposed to establish should have a divine sanction ; and for this purpose Mahomet turned a calamity, with which he was afflicted, to his advantage. He was often subject to fits of the epilepsy, a disease which those whom it afflicts are desirous to conceal ; Mahomet gave out therefore that these fits were trances, into which he was miraculously thrown by God Almighty, during which he was instructed in his will, which he was commanded to publish to the world. By this strange story, and by leading a retired, abstemious, and austere life, he easily acquired a character for superior sanctity among his acquaintance and neighbors. When he thought himself sufficiently fortified by the numbers and the enthusiasm of his followers, he boldly declared himself a prophet, sent by God into the world, not only to teach his will, but to compel mankind to obey it.

As we have already mentioned, he did not lay the foundation of his system so narrow as only to comprehend the natives of his own country. His mind, though rude and enthusiastic, was enlarged by travelling into distant nations, whose manners and religion he had made a peculiar study. He proposed that the system he es-

tablished should extend over all the neighboring nations, to whose doctrines and prejudices he had taken care to adapt it. Many of the inhabitants of the eastern countries were at this time much addicted to the opinions of Arius, who denied that Jesus Christ was co-equal with God the Father, as is declared in the Athanasian creed. Egypt and Arabia were filled with Jews, who had fled into those corners of the world from the persecution of the emperor Adrian, who threatened the total extinction of that people. The other inhabitants of these countries were Pagans. These, however, had little attachment to their decayed and derided idolatry ; and, like men whose religious principle is weak, had given themselves over to pleasure and sensuality, or to the acquisition of riches, to be better able to indulge in the gratifications of sense, which, together with the doctrine of predestination, composed the sole principles of their religion and philosophy. Mahomet's system was exactly suited to these three kinds of men. To gratify the two former, he declared that there was one God, who created the world and governed all things in it ; that he had sent various prophets into the world to teach his will to mankind, among whom Moses and Jesus Christ were the most eminent ; but the endeavors of these had proved ineffectual, and God had therefore now sent his last and greatest prophet, with a commission more ample than what Moses or Christ had been entrusted with. He had commanded him not only to publish his laws, but to subdue those who were unwilling to believe or obey them ; and for this end to establish a kingdom upon earth which should propagate the divine law throughout the world ; that God had designed utter ruin and destruction to those who should refuse to submit to him ; but to his faithful followers, he had given the spoils and possessions of all the earth, as a reward in this life, and had provided for them hereafter a paradise of all sensual enjoyments, especially those of love ; that the pleasures of such as died in propagatiug the faith, would be peculiarly intense, and vastly transcend those of the rest. These, together with the prohibition of drinking strong liquors, (a restraint not very severe in warm climates) and the doctrine of predestination, were the capital articles of Mahomet's creed. They were no sooner published than a vast number of his countrymen embraced them with implicit faith. They were written by the priest we formerly mentioned, and compose a book called the *Koran*, or Alkoran, by way of eminence, as we say the Bible, which means the Book. The person of Mahomet, however, was familiar to the inhabitants of Mecca ; so that the greater part of them were sufficiently convinced of the deceit. The more enlightened and leading men entered into a design to cut him off ; but Mahomet, getting notice of their intention, fled from his native city to Medina Tahmachi, or the city of the Prophet. The fame of his miracles and doctrine was, according to custom, greatest at a distance, and the inhabitants of Medina received him with open arms. From his flight which happened in the 622d year of Christ, the 54th year of Mahomet's age, and the 10th of his min-

istry, his followers, the Mahometans, compute their time, and the era is called in Arabic, Hegira, "the Flight."

Mahomet, by the assistance of the inhabitants of Medina, and of others whom his insinuation and address daily attached to him, brought over all his countrymen to a belief, or at least to an acquiescence in his doctrines. The speedy propagation of his system among the Arabians, was a new argument in its behalf among the inhabitants of Egypt and the East, who were previously disposed to it. Arians, Jews, and Gentiles, all forsook their ancient faith, and became Mahometans. In a word, the contagion spread over Arabia, Syria, Egypt, and Persia ; and Mahomet, from a deceitful hypocrite, became the most powerful monarch in his time. He was proclaimed king at Medina, in the year 627 ; and after subduing part of Arabia and Syria, he died in 632, leaving two branches of his race, both esteemed divine among their subjects. These were the caliphs of Persia and of Egypt, under the last of which Arabia was included. The former of these turned their arms to the East, and made conquests of many countries.

The caliphs of Egypt and Arabia directed their ravages towards Europe, and under the name of Saracens, or Moors (which they obtained, because they entered Europe from Mauritania, in Africa, the country of the Moors) reduced most of Spain, France, Italy, and the islands in the Mediterranean.

In this manner did the successors of that impostor spread their religion and conquests over the greatest part of Asia, Africa, and Europe ; and they still give law to a very considerable part of mankind.

Religion.] The Arabian religion was, in the state of ignorance, as they called the period before Mahomet, Sabian ; but the Sabian faith is not clearly and satisfactorily ascertained. It is generally allowed that they admitted the existence of one supreme God, the Creator and Lord of the universe, whom they denominated "Allah Taala," the most high God : and the religion of the noble and learned Arabs, as well as of the poets, was pure theism. We have Arabian verses of unsuspected antiquity, which contain pious and elevated sentiments with respect to the goodness, justice, and omnipotence of God. It is certain, however, that they very soon degenerated, and fell into idolatry. This consisted chiefly in the worship of the fixed stars and planets. To the worship of these they were easily led by observing the regularity of their motions, and also, that the changes of the weather happened at the rising or setting of some of them for a considerable period ; and hence they ascribed to them a divine power, and conceived themselves indebted to them for their rains, which were highly beneficial to their parched country. These they honored as inferior deities, and as mediators with God, implored their intercession. This kind of worship was proscribed by Moses, and is frequently alluded to in the book of Job, particularly ch. xxxi. 26-28. Accordingly they had seven celebrated temples, dedicated to the seven planets ; and this planetary worship has been supposed by some to have been the first species of idolatry.

The Magian religion was introduced among some tribes of Arabia, a long time before Mahomet, in consequence of the vicinity of the Persians, and their intercourse with the Arabians ; and hence this impostor borrowed many of his institutions from it. Judaism also is said to have been introduced among the idolatrous Hamyarites, by Abu Carb Asad, about 700 years before Mahomet, and the Jews, who fled into Arabia, in great numbers, after the destruction of their country by the Romans, made proselytes of several tribes, and in time became very powerful, and obtained possession of several towns and fortresses. At length, Yusef, king of Yemen, raised a dreadful persecution against them, and put them to death by various tortures, one of which was throwing them into a glowing pit of fire.

Christianity had likewise made great progress in Arabia, before the time of Mahomet. Whether St. Paul preached in any part of Arabia, properly so called, it is not easy to determine ; but that the Christian religion was planted, at a very early period, in this country, is an unquestionable fact. When the eastern church, soon after the beginning of the third century, was much harassed by disorders and persecutions, great numbers of them sought shelter in Arabia. The principal tribes that embraced Christianity were Hamyar, Ghassan, Rabia, Taghlah, Bahra, Tomuh, part of those of Tay, and Kodaa, the inhabitants of Najran, and the Arabs of Hira. Such were the principal religions which obtained among the ancient Arabs. For an account of the modern religion of these people, see the preceding article.

Government.] The primitive form of government, among the Arabs, was of the patriarchal kind ; and the same form, according to Niebuhr, has ever subsisted without alteration ; a circumstance which proves the antiquity of this people. Among the Beduins, or pastoral Arabs, the descendants of the ancient Scenites, or Sunnites, it is preserved in all its purity. Of these, such as live in tents, have many sheiks, each of whom governs his own family with a power almost absolute. All the sheiks, however, who belong to the same tribe, acknowledge a common sheik, whose authority is limited by custom. The dignity of grand sheik is hereditary in a certain family ; but the inferior sheiks, upon the death of a grand sheik, choose a successor out of his family, without regard to age, or lineal succession, or any other consideration, except superiority of abilities. This right of election obliges the grand sheik to treat those of the inferior order rather as associates, than subjects, sharing with them his sovereign authority.

Manners and Customs.] The manners and customs of the inhabitants are for the most part similar to those of the other Beduins, so frequently described by numerous travellers. Those of the country of Yemen have been accurately delineated by Niebuhr ; and this province will probably, after the utmost discovery, continue to be regarded as the most interesting portion ; representing, as Gibbon has observed, the Arabia Felix of antiquity. In Yemen murder is punished with death, but oftener left to private

revenge, which occasions family feuds, that pestilence of society. In politeness the Arabs vie with the Persians, and there are still remains of their ancient hospitality. The common salutation is the *Salam Alekum*, or Peace be with you ; in pronouncing which words they raise the right hand to the heart, but this form is seldom addressed to Christians. On meeting in their wide deserts, the salutations are multiplied ; and the hand of a superior is kissed in token of respect. The houses, though of stone, are meanly constructed ; the apartments of the men being in front, those of the women behind. Of a middle stature, thin, and dried as it were by the sun, the Arab is moderate in his food, the common people seldom exceeding a repast of bad bread made from durra, a kind of millet, mixed with camel's milk, oil, butter or grease ; the only drink being water. This bread of durra, custom has taught them to prefer to that of barley, which, though pleasant, they think unsubstantial. Meat is little used, even by the rich, who deem it unhealthy in a hot climate. The orientals in general being water-drinkers, they are very fond of pastry. The most noted drink is coffee, which they prepare like the Turks, by burning it in an open pan, and then bruising in a stone or wooden mortar. In Yemen it is rarely used, as in their opinion it heats the blood ; but of the shells, or husks of the coffee, they prepare a liquor in the manner of tea. The most distinguished Arabs use porcelain from China, while the common people have recourse to earthen ware. Spirituous liquors, though forbidden, are not absolutely unknown ; and they sometimes smoke a plant resembling hemp, which produces intoxication ; nor is tobacco neglected, which is smoked either in the Turkish or Persian manner.

Dress.] There is a great variety in the national dress of the Arabians. Their head-dress consists of fifteen caps laid over one another ; some of which are of linen, and the rest of thick cloth, cotton. The uppermost one is richly embroidered with gold, and some sentence of the Koran ; and over all they wrap a large piece of muslin, ornamented at the ends, and flowing loose upon the shoulders, with silk or golden fringes. The Arabs of the common classes wear only two caps, with the sash carelessly bound on the head. Some have drawers and a shirt ; but the greater number have only a piece of linen about their loins, a large girdle and a piece of cloth upon their shoulders ; in other respects they are naked, having neither shoes nor stockings. In the highlands, where the weather is colder, the people wear sheep-skins ; and in the night, as a security against insects, they sleep in sacks. Persons of middle rank wear sandals, instead of shoes. The ordinary dress of the Arabs is very simple ; but they have also a sort of great coat without sleeves, called "abba," which is still more simple. In several parts of Arabia the men wear no drawers ; but these, with a large shirt, are the whole dress used by the women. In several provinces, they wear different sorts of veils. All wear rings on their fingers, arms, nose, and ears. They stain their nails red, and their hands and feet of a brownish yellow, with juice of the alhenna ; and they paint the circle of the eyes.

and even the eye-lashes black, with a preparation of lead ore. The women of Yemen also make punctures in the face, to improve their beauty. All wear the beard of its natural length ; but the Arabs keep the mustaches very short. The Jews are forbidden the use of the turban, wearing instead of it, a small bonnet ; nor are they permitted to dress in any color but blue. The dress of the Banians, settled in Arabia, consists of a red turban of a particular form, a piece of white linen upon their shoulders, another about their loins, and slippers.

Language.] The language of the Arabs was, even in ancient times divided into several dialects, as may be suspected from its wide diffusion.* Even in Yemen there are subdivisions ; and polite people use a different enunciation from the vulgar. The language of the Koran is so different from the modern speech of Mecca, that it is taught in the colleges there, as the Latin is at Rome. The chief poets are now found among the wandering Arabs in the country of Jof, or Mareb, adjoining to Yemen on the E.† Some also appear in the towns, where they amuse the company in coffee-houses ; in this, as in other respects, resembling the Turkish. The ancient treasures of Arabian literature are well known to the learned world ; but few of these noble monuments were composed in Arabia, being mostly produced in the conquered countries from Samarcand to Cordova.

Literature.] The mode of education among the Arabs is very different from that of the Europeans. The former strive to hasten the age of maturity, as much as the latter endeavor to retard it. The Arabs, says Niebuhr, are never children ; but many Europeans continue children all their life. As soon as boys leave the haram, about the age of five or six years, they are accustomed to think and speak with gravity, and to pass whole days in the company of their fathers or preceptors. In the cities many of the lowest rank are taught both to read and write. Persons of distinction retain preceptors in their families to instruct their children and young slaves. In almost every mosque is a school, having a foundation for the support of teachers, and the maintenance and instruction of poor scholars. In great towns, there are likewise other schools, to which people of middle rank send their children to receive religious instruction, and to learn reading, writing, and arithmetic. There are no girls taught in these schools, but they are privately taught by women. Besides these small schools, there are more considerable seminaries of education in some of the great towns of Arabia.

There are colleges, in which the sciences of astronomy, astrology, philosophy, and medicine are taught : but the Arabians, for the want of books and good masters, make little progress ; and

* In regard to the extent of country through which the Arabic is spoken, Mr. Martyn observes, that the Arabic translation is of more importance than one fourth of all the translations now in hand. "We will begin," says he, "to preach to Arabia, Syria, Persia, Tartary, part of India and of China, half of Africa, all the sea-coast of the Mediterranean, and Turkey ; and one tongue shall suffice for them all."

Buchanan's Researches.

† Niebuhr, 95.

their attainments are very partial and imperfect. In the dominions of Imam, there have been for a long time two famous academies ; one at Zebid, the other at Damar. The chief employment of men of letters among the Arabians, are the interpretation of the Koran, and the study of the ancient history of the Mahometans.

Some seeds of the sciences seem to have sprung up in Arabia before they were known to other nations. They were the first who studied the laws of the heavenly bodies. Their knowledge of astronomy, however, was neither very accurate nor very extensive. In Arabia we find the cradle of poetry and eloquence, which had scarcely appeared before they arrived at sudden maturity. Among the ancient Arabs, eloquence was in high repute. Their orations were of two sorts, metrical and prosaic : the one being compared to pearls strung, the other to loose ones. They attempted to excel in both ; and whoever was able in an assembly to persuade the people to a great enterprise, or to dissuade them from a dangerous one, or gave them any other salutary advice, was honored with the title of " Khatab," or orator, which is now given to the Mahometan preachers.

The Arab learning in the first period, called the time of ignorance, consisted, according to Abulpharagius, in the knowledge of their language, the propriety of discourse, the composition of verse, and the science of the stars ; but their chief attention seems to have been directed to oratory and poetry. The second period is more distinguished, at least from the time of Al Mamon, who flourished about the year 820, and has the honor of being the founder of the modern Arabian learning. Almanzor, about fifty years before Al Mamon, commenced the literary reform, when he moved the imperial seat from Damascus to Bagdad ; and when he extended the Arabian literature, which had been confined to medicine and a few other branches, to sciences of every denomination. His grandson, Al Mamon, completed the work which was only begun, and sent for all the best books out of Chaldea, Greece, Egypt, and Persia, relating to physic, astronomy, cosmography, music, chronology, &c. and pensioned a number of learned men, skilled in the several languages and sciences, to translate them into Arabic. By this means, divers of the Greek authors, lost in their own country and language, have been preserved in Arabic. The eastern conquerors carried their empire from Asia, even into the remote regions of Spain ; and letters followed them wherever they went.

From that time Arabia became the chief seat of learning ; and we find mention made of learned men and books, without number. The revival of learning in the tenth century, by Gorbert, known after his elevation to the pontificate, by the title of Silvester II. and afterwards among the Europeans in general, may be ascribed to the instructions and writings of the Arabian doctors and philosophers, and to the schools which they founded in several parts of Spain and Italy. And in the twelfth century, the inquisitive of different countries frequented the schools of the Saracens in Spain, and disseminated the knowledge which they obtained there, after

their return. At this time, many of the learned productions of the Arabians were translated into Latin, which facilitated the general progress of science.

Cities and Towns.] Arabia has been compared to a cloke of frize, laced with gold, the skirts alone presenting cities and other marks of civilization, while the great mass of the country is possessed by wandering tribes. The most celebrated cities are Mecca and Medina ; but being sacred ground, the infidels are not permitted to approach ; and we are obliged to trust to the inaccuracy and exaggeration of oriental writers. Mecca " was known to the Greeks under the name of Macoraba, and has not, in the most flourishing period, exceeded the size and populousness of Marseilles. Some latent motive, perhaps of superstition, must have impelled the founders in the choice of a most unpromising situation. They erected their habitations of mud or stone, in a plain about 2 miles long and 1 mile broad, at the foot of three barren mountains : the soil is a rock ; the water even of the holy well of Zemzem is bitter or brackish ; the pastures are remote from the city ; and grapes are transported above seventy miles, from the gardens of Tayef. The fame and spirit of the Koreishites, who reigned in Mecca, were conspicuous among the Arabian tribes ; but their ungrateful soil refused the labors of agriculture, and their position was favorable to the enterprises of trade. By the sea-port of Jeddah, at the distance only of forty miles, they maintained an easy correspondence with Abyssinia. The treasures of Africa were conveyed over the peninsula to Gerrha or Katif in the province of Bahrein, a city built, as it is said, of rock salt, by the Chaldean exiles : and from thence, with the native pearls of the Persian gulf, they were floated on rafts to the mouth of the Euphrates. Mecca is placed almost at an equal distance, a month's journey, between Yemen on the right and Syria on the left hand. The former was the winter, the latter the summer station of her caravans. In the markets of Saana and Merab, in the harbors of Oman and Aden, the camels of the Koreishites were laden with a precious cargo of aromatics : a supply of corn and manufactures was purchased in the fairs of Bostra and Damascus ; the lucrative exchange diffused plenty and riches in the streets of Mecca ; and the noblest of her sons united the love of arms with the profession of merchandize."*

The government of this holy city is vested in a sheref, who is a temporal prince ; and his revenue is increased by the donations of Mahometan sovereigns.

Medina stands about 200 miles N. of Mecca, being, as well as the latter, about a day's journey from the shores of the Red Sea. It is, according to Niebuhr, a small town, surrounded with a paltry wall, little remarkable except for the tomb of Mahomet.

Sana, or Saana, in Yemen, is reputed at present the chief city of Arabia. It is situated at the bottom of a mountain called Nikkum, near which is a spacious garden. The city is not very ex-

* Gibbon, ix. 227.

tensive, as one may walk round it in the space of an hour, so that the circuit cannot exceed four miles; and even of this small space a part is occupied by gardens.* The walls are of brick, with seven gates; and there are several palaces of burnt brick, or of stone; but the common houses are of bricks dried in the sun. There are several caravanseras for merchants and travellers. Fuel is extremely rare though there be some pit-coal and peat; but wood is scarce, even in the Happy Arabia. There are excellent fruits, particularly grapes of many varieties. About 6 miles to the north there is a pleasant dale, enlivened with several rivulets; and to the west is a considerable stream.

When such is the chief city of Arabia, the description of the others cannot be very interesting. Mocha is well built, the houses very lofty, and are with the walls and forts covered with a chinam or stucco, that gives a dazzling whiteness to them. The harbor is semicircular, the circuit of the wall is two miles, and there are several handsome mosques in the city.

Suez, the Arsinoe of the ancients, is surrounded by the desert, and but a desolate place. The ships are forced to anchor a league from the town, to which the leading channel has only about nine feet water. It stands at the extremity of the Red Sea, having the sea to the E. the harbor to the S. which is formed by an island E. No water can be procured within six or seven hours journey to the N. E. It lies in lat. 29° 50' N. lon. 30° 28' E.†

Jedda is the place of the greatest trade in the Red Sea, and is the sea port of Arabia, for there the commerce between Arabia and Europe meets and is interchanged, the former sending her gums, drugs, coffee, &c. and from Europe comes cloths, iron, furs and other articles by the way of Cairo. The port of Jedda, according to Mr. Bruce, is very extensive, consisting of numberless shoals, small islands, and sunken rocks, with deep channels between them. The harbor is very secure, but difficult of entrance; the pilots, however, are very skilful and accidents seldom happen.

Kesem or Keschin belongs to the country called Mahrah: to the sheik of this town the noted isle of Socotra belongs, which is celebrated for aloes.‡ The province of Omon is divided among many sheiks, but Rostak is esteemed the capital. Maskat is however the most considerable town, and the best known to Europeans, having an excellent harbor, and being from early times a staple of trade between Arabia, Persia, and the Indies. It was taken by the Portuguese in 1508, and they retained it for a century and a half. It is visited by English ships from Hindostan; and such is its consequence, that the Imam or prince of Oman is often styled Imam of Maskat.

Lahsa, the capital of the province so called, is a large and well built town, standing on a torrent which falls into a considerable bay opposite to the isle of Bahrin, celebrated for the pearl fishery.§

* Nieb. Desc. 201.
‡ Niebuhr, 248.

† Journal to Sinai:
§ Ib. 204.

Edifices.] Among the chief edifices of Arabia must be named the Kaba, or temple of Mecca, which, according to the representation of Niebuhr, rather resembles the old Asiatic temples of Hindostan and Siam than a mosque, being an open square, encompassed with a colonade, and ornamented with minarets, as the others are with pyramids or obelisks. In this open space, which, as well as that of Medina, it seems improper to call a mosque, there are five or six houses of prayer, or chapels; while in the centre is a small square edifice, peculiarly styled the Kaba, in which is fixed a black stone, the early object of Arabian adoration.

Manufactures.] Although the Arabians are ingenious and diligent, their manufactures are of little consequence. The mechanical arts could not well be brought to any considerable degree of perfection among a people, who knew but few wants. As their productions are less splendid than useful, it is rather in towns, than in the bosom of deserts that they grow up; because necessity is the parent of industry. The Arabs, entirely occupied in warring against man and beast, excelled only in the manufacture of scymetars, bows and arrows, and darts; their musquets being mere matchlocks of mean execution: nor have they made any great progress in modern times.

Even in Yemen, the works in gold and silver, and the coin itself, are produced by Jewish manufacturers. In the whole country of Arabia there are neither wind-mills nor water-mills. At Mocha there is one glass-house; and in Yemen there are some coarse linen manufactures. Their cotton stuffs were never greatly esteemed; and few of their other manufactures are the produce of the skill and labor of native Arabians.

Commerce.] The commerce of Arabia was formerly very considerable, as its ports facilitated a communication between the eastern and western world. But since the Portuguese opened a passage to India by the Cape of Good Hope, its intercourse with Hindostan has very much declined. From Yemen are exported coffee, aloes, myrrh (the best of which is from Abyssinia,) olibanum, or an inferior kind of frankincense, senna, ivory, and gold from Abyssinia. The European imports were iron, steel, cannon, lead, tin, cochineal, mirrors, knives, sabres, cut glass, and false pearls. Niebuhr regards aloes and frankincense, (the latter chiefly from Hadramaut,) as the only native articles of commerce, before coffee came into use.* The principal trading ports are Jeddah or Gedda, the harbor of Mecca, Loheia, and Beit el Fakih, carrying on a considerable trade in coffee; Hodeida, Mocha, Aden, Mascat, Sur or Seger, Faitach and Dafar, on the Arabian ocean; Bahrain and El Katif in the gulf of Bassora.

Besides the maritime commerce, a considerable traffic is carried on by land by means of the caravans of Aleppo and Suez, which bring hither velvets, sattins, armoisins, and all sorts of rich stuffs; saffron, mercury, vermillion, &c. and take in return partly

* p. 245.

the natural products of the country, partly manufactures, and partly foreign merchandize brought from the Indies, from Aleppo, and from Europe.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE AND SEASONS, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, MOUNTAINS, DESERTS, BOTANY, ZOOLOGY, MINERALOGY, NATURAL CURIOSITIES, ISLES.

Climate and Seasons.] IN the mountains of Yemen there is a regular rainy season, from the middle of June to the end of September ; but even then the sky is rarely covered with clouds for twenty-four hours at a time ; and during the remainder of the year a cloud is scarcely to be seen. At Maskat, and in the eastern mountains, the rainy season extends from the middle of November to the middle of February ; and in Omon there is rain from the middle of February to the middle of April. In the plains of Yemen rain is sometimes unknown for a whole year : and in July and August the thermometer will be 98°, while at Sana in the mountains it is 85°. In general the wind from the sea is moist, and that from the interior deserts is dry, in the northern parts of which are chiefly perceived the disastrous effects of the burning wind called Samiel.

Face of the Country.] The general aspect of Arabia presents a central desert of great extent, with a few fertile *oases* or isles, as in Africa ; while the flourishing provinces are those situated on the shores of the sea, which supplies rain sufficient to maintain the vegetation. In Yemen there are mountains of considerable height, but chiefly barren and unwooded ; while the temperature and plants form a striking contrast with those of the plains : yet the want of rivers, lakes, and perennial streams, must diffuse ideas of sterility through the Arabian landscape.

Soil and Agriculture.] The nature of the soil has not been indicated. The grain in general yields little more than ten for one ; but the durra sometimes greatly exceeds this ratio, yielding in the high lands 140, and in the Tehama, or plain, from 200 to 400. By their mode of sowing and watering this grain the inhabitants of Tehama reap three successive crops from the same field in the same year. The plow is simple : and the pick is used instead of the spade. The chief exertion of agricultural industry is to water the lands from the rivulets and wells, or by conducting the rains. The harvest is torn up by the roots, and forage cut with the sickle. Barley is reaped near Sana in the middle of July ; but the season depends on the situation. At Maskat wheat and barley are sown in December, and reaped in March.

Among the chief vegetable products of Arabia, Niebuhr reck-

ons aloes, myrrh, frankincense of an inferior kind, and coffee ; and also cocoa trees, pomegranates, dates, apricots, peaches, almonds, filberts, pears, figs, and tamarinds. But the best frankincense, with spikenards, cinnamon, cassia, cardamums, and pepper, are imported from Hindostan. The orange trees are brought from Portugal, and the lemon from Italy ; the mangosteen and cocoa, with several others, are imported from Hindostan.

Rivers.] In the defect of rivers strictly belonging to Arabia, the Euphrates and Tigris, which pass through Irak Arabi, have been claimed by some geographers ; and the Euphrates may be aptly considered as an Arabian river. But in Arabia Proper what are called rivers are mere torrents, which descend from the mountains during the rains, and for a short period afterwards. The most important river is probably that which rises near Sana, and joins the Indian sea below Harjiah. The smaller streams of Yemen may be traced in Niebuhr's map of that country. The little river of Krim flows from Mahrah into the same sea, and is followed by two or three brooks in Omon. One or two small saline lakes occur in situations encircled with hills, which prevent the water from passing.

Mountains and Deserts.] The chief range of mountains seems to proceed in the direction of the Red Sea ; towards the N. not more than 30 miles distant, but sometimes in the S. about 150, a circumstance which imparts extent and fertility to Yemen. The hills of Omon seem a continuation of those on the other side of the Persian gulf ; and the isles in the mouth of that gulf may be regarded as summits of that range. In the country of Seger, commonly ascribed to Hadramaut, there is a range of hills remarkable for the product of frankincense.

What is called the desert of Sinai, is a beautiful plain nearly nine miles long, and above three in breadth ; it lies open to the north-east, but to the southward is closed by some of the lower eminences of Mount Sinai ; and other parts of that mountain make such encroachments upon the plain as to divide it into two, each so capacious as to be sufficient to receive the whole camp of the Israelites.

From Mount Sinai, may be seen Mount Horeb, where Moses kept the flocks of Jethro, his father-in-law, when he saw the burning bush. On those mountains, are many chapels and cells, possessed by the Greek and Latin monks, who, like the religious at Jerusalem, pretend to shew the very spot where every miracle or transaction recorded in scripture happened.

Sinai is a lofty, steep mountain, ascended by 14,000 stone steps. On the summit is a Christian church, and a Turkish mosque. In a vale not far remote stands the solitary rock, now called by the Arabs, *the stone of Moses* ; by the Greeks, *the stone of the fountains*, which Moses struck and the water flowed. It is twelve feet high, eight or ten broad. It is a granite marble, of brick color. There remain on it to this day, the lively impressions of the miracle. Still we see the place whence the water gushed. Twelve different openings, as so many mouths, proclaim the genuineness of scripture history. *Exod. xvii. 1.*

In the wilderness of Paran is also the rock mentioned Numb. xx. 2, which Moses struck twice, before the water flowed, thirty-eight years distant from the other transaction. This is a large rock, and like the other shows various openings from top to bottom, whence the water burst when smitten by the rod of Moses.*

The sandy deserts of Arabia are more striking objects than the mountains. From Omon to Mecca the greater part of Neged is one prodigious desert, interrupted towards the frontiers of Hejaz and Yemen, by Kerjé, containing the district of Sursa, and some fertile spots and towns, indicated by Niebuhr. The N. W. part of Neged presents almost a continued desert, a prolongation as appears of the other, with an *oasis*, Ared on the W. of Lahsa, including Jabrin, and some other places mentioned by the same author. In this desert there is also the *oasis* of Mount Schamer, and perhaps several others, which may remain for a long time unknown to geography.

Botany.] The greater part of Arabia being composed of dry barren deserts of sand, wholly destitute of rivers, and containing but here and there a few scanty springs of brackish water, offers no adequate recompense to botanical investigations. The vegetables in these districts are of rare occurrence, and consist chiefly of the saline succulent species able to endure the full force of a vertical sun, with no other refreshment than what is afforded by the nightly dews. The greater part of them have little external beauty, and when found in more propitious climates obtain notice only from their singularity : here, however, they serve to mitigate the thirst of the parched camel, and to keep up the spirits of the toiling caravan, by breaking in occasionally on the melancholy uniformity of the desert. A more interesting scene, however, is presented to the botanist on the western side of the Arabian desert ; here numerous rivulets descend from the mountains into the Red sea, and scatter with a lavish hand fragrance and verdure wherever they flow : the mountains themselves too, whence these streams originate, abound in vegetation, so that the plants in this part of Arabia may be conveniently distributed into three classes, namely, those that inhabit the sea shore, the plains, and the mountains. The first of these divisions bears a near affinity to the scanty flora of the desert : a sandy soil impregnated with salt, and an open exposure to the influence of the sun, produce similar effects in both situations. The champaign country, between the shore and the mountains, though traversed by streams, is yet too deficient in water to support the luxuriant vegetation that distinguishes the plains of India ; the lower parts are chiefly occupied by grasses and other humble plants, which afford a most grateful sustenance to the flocks and herds of the pastoral tribes that wander over them. The sides of the rivers, the valleys among the mountains, and the plains at their feet, are far superior to the rest of the country. Here cultivation and nature seem to contend with each other in the richness of their productions ; nor

is it easy to assign exactly the limits of each. Many of the Indian and Persian plants, distinguished for their beauty or use, have been transported hither in former ages, and are now found in a truly indigenous state ; this is probably the case with the tamarind, the cotton tree, the pomegranate, the banyan tree, or Indian fig, the sugar cane, and a multitude of valuable species and varieties of melons and gourds. Two valuable trees however are the peculiar boast of Arabia Felix, namely, the coffee, found both cultivated and wild, and the amyris opobalsamum, from which is procured the balm of Mecca, the most fragrant and costly of all the gum resins. There are no proper forests in Arabia, although groves and scattered trees are by no means unfrequent among the mountains. Of the palms, it possesses the date, the cocoa nut, and the great fan palm. The sycamore fig, the plantain, the almond and apricot, the bead tree, the mimosa nilotica and sensitiva, and the orange, nearly complete the catalogue of its native and cultivated trees. The list of shrubs and herbaceous plants does not contain many that would be interesting to the general reader : among these, however, may be particularized the ricinus, the liquorice, and the senna, all used in medicine ; and the white lily and greater pancratium, distinguished for their beauty and fragrance.

Zoology.] The horse is the glory of Arabian zoology. According to Zimmerman this animal is found wild in the extensive deserts on the N. of Hadramaut.* They are here divided into two great classes, the *Kadishi*, or common kind, whose genealogy has not been preserved ; and the *Kochlani*, or noble horses, whose breed has been ascertained for two thousand years, proceeding, as they fable, from the stalls of Solomon. They are reared by the Bedouins, in the northern deserts, between Bassora, Mardin, and the frontiers of Syria ; and though they are neither large nor beautiful, their race and hereditary qualities being the only objects of estimation, the preservation of their breed is carefully and authentically witnessed ; and the offspring of a Kochlani stallion with an ignoble race is reputed Kadischi. These will bear the greatest fatigues, and pass whole days without food, living, according to the Arabian metaphor, on air. They are said to rush on a foe with impetuosity ; and it is asserted that some of them, when wounded in battle, will withdraw to a spot where their master may be secure ; and if he fall they will neigh for assistance. Accordingly their value is derived from their singular agility, and extreme docility, and an uncommon attachment to their masters. The Arabian steeds are sometimes bought at excessive rates by the English, at Mocha. There is also in this country a superior breed of asses, approaching in form and qualities to the mule, and sold at high prices.

This region, or Africa, seems also the native country of the camel, emphatically styled by the orientals the ship of the desert ; being, by the expansion of its feet, the faculty of bearing thirst

* *Zoologia Geographica*, 1777, 4to. p. 140, from Leo Afric.

and hunger, and other qualities, peculiarly adapted by the author of nature to perambulate the sandy wastes, which would otherwise remain unpassable.

The buffalo seems unknown, being an animal which delights in mud and water; but the cattle have generally a hunch on the shoulder. The breed of sheep has not been particularly illustrated; but it would appear that both the wool and mutton are coarse. The rock goat is said to be found in the mountains of Arabia Petraea. The other animals are the jakkal, or chacal; the hyena towards the Persian gulf; numerous monkeys in the woods of Yemen; the jerboa, or rat of Pharaoh, in Neged: there are also antelopes, and wild oxen, with wolves, foxes, and wild boars, and the large and small panther. The tiger seems utterly unknown; and the lion only appears beyond the Euphrates. Among the birds may be named the pheasant, common in the forests of Yemen, as the grey partridge is in the plains; while the ostrich is no stranger in the deserts. A bird of the thrush kind, venerated because it destroys the locusts, is thought to come annually from Corasan. Land tortoises abound; and are eaten by the Christians in Lent. A little slender serpent, called baetan, spotted with black and white, is of a nature remarkably poisonous, the bite being instant death. The locust too is numerous; but the natives esteem the red kind as a fat and juicy food, and view it with no more aversion than shrimps or prawns are beheld by us.

Mineralogy.] The mineralogy of Arabia is of small importance. It has no native gold, nor any silver, besides that which is mingled in the lead mines of Oman. In the northern district of Yemen, called Saade, there are some mines of iron, which is brittle. Its precious stones have been imported from Hindostan: its agates, called Mocha stones, are brought from Surat, and the best cornelians from the gulf of Cambay. Yemen, however, produces onyxes; a kind of sardonyx is found near Damar. Rock salt appears near Loheia, and in Ajemen. Niebuhr has observed pentagonal pillars of salt, with blueish alabaster, selenite, and various spars; but it does not appear that any of the gems are produced in Arabia. The pearls and spices, of which Arabia formerly boasted, were probably the products of the Indies and the coasts of Africa. Near Hamada, in a district of Yemen called Kaukeban, there is a warm spring of mineral water.

Natural Curiosities.] Several of those uncommon appearances which geographers style natural curiosities, may, no doubt, be found in this extensive country, when more thoroughly explored. Amidst the deficiency of water, it is not surprising that the grand reservoir near the ancient city of Mareb, though in a small part a work of art, was regarded as a singular exertion of nature.* Mareb is still the chief town of the province of Jof, about 75 miles N. E. from Sana, containing about 300 mean houses, with a wall and three gates. In an adjacent vale, about 20 miles in length, were united six or seven rivulets, running from the west

* Niebuhr, 240.

and from the south, partly from Yemen ; and some said to be perennial streams, full of fish. The two chains of mountains, inclosing this vale, approach so near at the east end that the space might be walked over in five or six minutes ; or was about a quarter of a mile. This opening being shut by a thick wall, the water was retained, and imparted particular advantages to agriculture. But the wall, constructed of large masses of hewn stone to the height of forty or fifty feet, was neglected after the fall of the Sabean kingdom ; and burst in the middle, leaving only the ruins on both sides, so that the water is now lost in the desert on the N. of Hadramaut.

Isles.] Besides several isles of little consequence in the Arabian gulf, there are two islands which deserve particular notice. Socotra, about 240 miles from the southern coast of Arabia, appears in all ages to have belonged to that country, and to have been celebrated for the production of aloes, still esteemed superior to any other. The inhabitants are clearly of Arabian extract. There are two bays, and some secure harbors ; and the isle is also said to produce frankincense, while ambergris and coral are found in the neighboring seas. The isle of Bahrin is in the Persian gulf, near the Arabian coast, and remarkable for the great pearl fishery in its neighborhood. The name *Bahrin* is a modern appellation ; for Abulfeda, as well as the Arabs of Lahsa, call the large isle Aual. The inhabitants of Aual, and the smaller isles, are Arabs, of the Chia persuasion. In the large isle there is a fortified town ; and in the whole group there may be forty or fifty mean villages.

ASIATIC ISLANDS.

INTRODUCTION.

GENERAL ARRANGEMENT OF THE ASIATIC ISLANDS, INCLUDING AUSTRALASIA AND POLYNESIA.

HAVING thus completed the description of the wide continent of Asia, so far as the limits assigned to this work would admit, a difficult field of investigation opens in the innumerable Asiatic islands, and those situated in the Pacific, or more properly Great Oriental Ocean.

These regions are, however, of so wide and distinct a nature, consisting of almost a new continent in the south of Asia, and scattered groups of isles in the Pacific, many of them nearer to South America than to Asia, that they cannot well be blended under one denomination, as was long since observed by the learned president Des Brosses, who, nearly half a century ago, proposed

that the countries to the south of Asia, namely New Holland, New Guinea, and New Zealand, &c. should be styled *Australasia*, and the numerous isles in the Pacific, *Polynesia*, from a Greek term implying many islands.* A description of the large island, or rather continent of New Holland, with its appendages, naturally follows that of Asia, and the Asiatic islands in the Indian ocean ; and will be properly succeeded by that of Polynesia, or the islands in the Pacific ; which are far remote from the American coast, but are connected by short passages with Australasia, the Sandwich islands alone excepted, which may however be followed by groups to be discovered to the S. W. so as to be connected with Polynesia. The reader needs scarcely be reminded, that in this quarter alone of the world this remarkable exception occurs ; for the islands belonging to both Americas, to Africa and to Europe, are sufficiently distinct and appropriated, while the name of Asiatic islands, enormous as Asia itself, might be diffused to such an extent, as to embarrass the utmost powers of geographical description, and present only vague confusion, instead of scientific precision. Before, however, a correct arrangement can be followed, it will be proper to fix some limits between the Indian and Pacific Oceans.

As the continent of America divides the Atlantic, or Great Western Ocean, from the Pacific, or Great Eastern Ocean, (both so termed in relation to the ancient and civilized world,) and as Africa divides the Atlantic from the Indian ocean, so, by parallel usage and deduction, what is called New Holland, may be considered as the fixed division between the Indian and Pacific, thus claiming with justice the authority of a continent, washed by the Indian ocean on the west, and the Pacific on the east ; while a line drawn from the most prominent central capes, in the North and South, may be regarded as a boundary of these two oceans. The southern extension of this imaginary line is of little moment ; but in the north it must be considered as a division of great importance to precise discussion, as the isles on the west must be considered as strictly Asiatic, and intimately connected with the description of Asia ; while those on the right belong to Australasia and Polynesia. This division must naturally and unavoidably depend on the observation of the widest channel between the Molucca islands,† and Papua, or New Guinea : and the degree of longitude, 130° from Greenwich, seems nearly to amount to a boundary. Hence Amboyna belongs to the Asiatic isles, while Timor-laut belongs to Australasia. The meridian of boundary passes through Ceram ; but the proximity of that isle to Amboyna, may properly connect it with the Asiatic isles, with which Mysol may also be classed. From the N. W. extremity of Papua, or rather some small islands lying at that extremity, a clear line may be drawn, following the same meridian, and leaving Gilolo among the Asiatic isles on the W. and those of Pelew

* *Histoire des Navigations aux Terres Australes.* Paris, 1756, 2 vols. 4to.

† This name originally confined to five small islands, has been extended, by the French geographers, to a large group between Borneo and New Guinea.

among the Polynesian, in the Pacific. This line then bending N. W. would include the Philippine islands and the Bashees, passing to the S. of Formosa ; the other limits and appellations being sufficiently clear.

Such may therefore be the assumed boundary between the Indian ocean and Chinese sea on the W. and the Pacific on the E. and between the Asiatic isles, and Australasia and Polynesia. The boundary between the two latter great divisions may be traced by regarding what is called New Holland, as a continent, or great leading island, with which those most adjacent must be regarded as connected. Hence Papua belongs to Australasia : and a line drawn in the latitude of three or four degrees to the N. of the equator, and then passing S. in the meridian of 170 E. from Greenwich, so as to include the New Hebrides, thence in the parallel of 50 S. gradually stretching to 175 W. from Greenwich, including New Zealand, and the isle called Chatham, will present the natural and precise boundary of Australasia.

That division called Polynesia, by far the most extensive, adjoins the W. to the line above drawn around the Asiatic isles ; thence it ascends about lat. 18, long. 128 E. in a N. E. direction, so as to include the isle called Rica de Plata, long. 161, and thence curving S. E. and encompassing the northern Sandwich islands, where our great navigator fell,† and the Marquesas, and extending to 120 W. from London. Any isles to the N. E. or E. of this line of demarcation may be regarded as belonging to North or South America.

The southern boundary of the Asiatic isles may be considered as sufficiently ascertained by the wide channel between them and New Holland ; while the N. W. extremity of Sumatra may present a meridian of separation on the W. between the Asiatic isles, eminently so styled, and those in the Indian ocean. The same western boundary may be assigned to Australasia.

The southern limits of the last, and of Polynesia, alone remain ; but as few or no islands have been discovered to the S. of New Zealand, the parallel of 50 S. lat. may be lastly assumed as the boundary of both.

Polynesia will thus extend from 50 S. lat. to about 35 N. lat. that is 85° or 5100 g. miles : while the breadth taken from long. 170 E. from Greenwich, to 130 W. upon the equator itself, will yield sixty degrees, or 3600 g. miles.

The length of Australasia may be computed from 95 of the same longitude to 185, that is 40° in lat. 30, or nearly 5000 g. miles ; while the breadth lat. 3 N. to lat. 50 S. will be 3180 g. miles.

Even the smallest division, that of the Asiatic isles, which has been called the Oriental Archipelago, is of great extent from 13 S. lat. to 22 N. lat. that is 35° , or 2100 g. miles ; while the length from 95 E. long. to 132, yields 37 degrees not far from the equator, nearly corresponding with the breadth.

† There are other Sandwich islands, lat. 59 S. or beneath the parallel of Cape Horn. Such is the perplexity of the received nomenclature.

ASIATIC ISLES.

ARRANGEMENT OF THOSE IN THE ORIENTAL ARCHIPELAGO.

1. ISLES OF SUNDA, OR SUMATRAN CHIAN.
2. BORNEO.
3. MANILLAS.
4. CELEBEZIAN ISLES.
5. SPICE ISLANDS.

AN inspection of the maps and charts of this part of the globe, will shew that a great chain of islands extends from Sumatra N. W. to Lackal or Lachal S. E. This chain includes Sumatra, Java, Balli, Sumbava, Florez, and Timor, as the chief isles ; with Sumba in the S. and in the N. Madura, Billiton, Banca, &c. This chain might either be termed the Sumatran islands, from the chief, or the received name of the isles of Sunda may be extended and restricted to this group ; which, besides the strait so called, presents many other sounds or passages, from the Indian ocean towards the Pacific and the Chinese sea.

Borneo, an island of vast extent, should not be considered as belonging to any group ; but the small isles around it may be termed the Bornean islands, as the Sooloos, Pulo Laut, Anumba, Natuna.

The Philippine islands may already be regarded as the most regular and precise group in these seas, including the Bashees, and other little groups in the north, and Mindanao and Pulawan in the south.

There remains the large island of Celebez, which may be considered as grouped with Shulla, Boutan, Salayar, &c. and the whole may be termed the Celebezian isles.

The Molucca islands, an ancient and venerable name, are properly only five, of small size, on the west of Gilolo ; but it seems proper to extend this appellation to Gilolo, Mysol, Ceram, Amboyna and Banda. The remaining isles in the S. E. belong to Papua in Australasia.

These five divisions are not only indicated by the hand of nature, but seem sufficient for a description of this vast archipelago.

1. THE ISLES OF SUNDA, OR THE SUMATRAN CHAIN.

This division, as already explained, comprises *Sumatra*, *Java*, *Balli*, *Lombok*, *Sumbava*, *Florez*, and *Timor* ; with several isles of less note in the vicinity of these.

Sumatra is an island of great extent, being not less than 950 miles in length, by about 200 in breadth, containing 177,000 square miles ;* on so vast a scale are the regions connected with Asia, that Great Britain, if situated in the oriental archipelago, would only in size rival Sumatra and Borneo. The English settlement of Bencoolen, in the S. E. part of this island, has occasioned par-

* Hatzel.

ticular attention to its nature and productions, especially since Mr. Marsden published an ample and intelligent account of this interesting island, from which this brief description shall be abstracted.* It was certainly unknown to the ancients, the information of Ptolemy terminating considerably to the north, and the mountain of Ophir, whence some have supposed this country known to Solomon, is a modern European denomination. The Arabs seem to have been acquainted with this island in the 9th century, but it became first known to the Europeans in the 16th. A chain of mountains runs through the whole isle, the ranges being in many parts double and treble, generally nearer to the western coast, where they approach within 20 miles of the sea ; but the height is not so considerable as to retain snow. Mount Ophir, immediately under the equinoctial line, is 13,842 feet above the sea, only yielding about 2000 feet to mount Blanc. Between the ridges of mountains are elevated plains with lakes and water-falls, one of which is from the summit of a conic mountain. There are many rivers on the western coast, but commonly impeded by sand-banks, so as to present few means of navigation. In the midst of what is called the Torrid Zone, the thermometer seldom rises above 85°, while in Bengal it attains 101°; and the inland inhabitants of the mountains use fires to dispel the morning cold ; yet frost, snow, and hail are unknown. Thunder and lightning are frequent, particularly during the N. W. monsoon. The year has two divisions, called the rainy and dry monsoons ; the S. E. or dry, beginning about May, and ending with September ; the N. W., or wet, beginning with November, and ending about March ; the intermediate months, April and May, October and November, being variable : on the west coast the sea breeze begins about ten in the forenoon, and continues till six in the evening ; being succeeded by the land breeze during the night. The soil is generally a stiff reddish clay, covered with a layer of black mould, the source of perpetual verdure ; but three quarters of the isle, especially towards the south, present an impervious forest. On the west, between the mountains and the sea, there are large swamps ; but even here the face of the country is remarkably broken and uneven. There seem to be many mines of gold, though mostly neglected ; and the copper is mingled with that metal. There are excellent ores of iron and steel : and that rare mineral, tin, is one of the chief exports, being principally found near Palimbang on the eastern shore, a continuation probably of the rich beds of Banca. Gold is found near Bencoolen, and in other places, but of inferior quality. The little island of Poolo Pisang, close to the foot of mount Poogon, is mostly a bed of rocky crystal. There are several volcanic mountains in Sumatra, as in most of the other islands of the oriental archipelago, but eruptions are unfrequent. The number of inhabitants in this island is estimated by Hassel, at 4,500,000 ; by Bruns, only at 2,250,000. The sea coast is chiefly occupied by the Malays, who seem to be recent settlers, and their

* History of Sumatra, 1784, 4to 2d edit.

language a dialect of a speech most widely extended, from Malacca, and perhaps the south of Hindostan, nearly as far as the western coasts of America, through the innumerable islands of the Pacific. By the account of Mr. Marsden there are inland races, of whom the Googoo are covered with long hair, and little superior to the Ourang Outangs of Borneo. The chief native sovereignty is that of Menang Cabou, but the Rejangs seem to retain the purest race and manners. They are rather short and slender: the noses of infants are flattened, and their ears are extended; but the eyes are dark and clear. The complexion is properly yellow, being without the red tinge, which constitutes a tawney or copper color: but the superior class of women is fair, and commonly of not unpleasing countenances.

The chief distinction between the natives and the Malays of the coast seems to be, that the former are fairer and stronger. The original clothing is made of the inner bark of trees, as in Otaheite; but the dress of the Malays consists of a vest, a robe, and a kind of mantle, with a girdle, in which is the *cree* or dagger. The villages are commonly on hills, and surrounded with fruit trees; the balli, or common hall, being in the centre. The houses are of wood and bamboos, covered with leaves of palm, standing on pillars, and scaled by a rude ladder. The furniture is of course simple, and common food rice: sago, though common, being less used than in the islands farther to the east. The horses are small but well made, and hardy: the cows and sheep also diminutive, the latter probably from Bengal. Here are also found the elephant, rhinoceros, hippopotamus, tiger, bear, otter, porcupine, deer, wild hog, civet cat, with many varieties of the monkey. The buffalo is employed in domestic labour. Among birds, the Sumatran or Argus pheasant is of distinguished beauty. The jungle fowl, or wild poultry, also appear; and there is a breed in the south of remarkable height likewise found in Bantam on the west of Java, which also gives name to the well known small breed. Insects of all kinds swarm, particularly the destructive termites. The most abundant article is pepper, the object of the British settlement; being produced by a climbing plant resembling a vine. The white pepper is procured by stripping the outer husk from the ripe grains. Camphor is another remarkable vegetable product, and cassia, a coarse kind of cinnamon, is found in the central parts of the country. Rattans are exported to Europe for walking canes. "The silk cotton (*bombax ceiba*) is also to be met with in every village. This is to appearance, one of the most beautiful raw materials the hand of nature has presented. Its fineness, gloss, and delicate softness, render it to the sight and touch much superior to the labor of the silk worm: but owing to the shortness and brittleness of the staple, it is esteemed unfit for the reel and loom, and is only applied to the unworthy purpose of stuffing pillows and mattrasses. It grows in pods from four to six inches long, which burst open when ripe. The seeds entirely resemble the black pepper, but are without taste. The tree is remarkable, from the branches growing out perfectly

straight and horizontal, and being always three, forming equal angles at the same height : the diminutive shoots likewise grow flat; and the several gradations of branches observe the same regularity to the top. Some travellers have called it the Umbrella tree, but the piece of furniture called a dumb waiter exhibits a more striking picture of it.*

The commerce is chiefly with Hindostan and China. The Malays excel in gold and silver filigree, and in weaving silk and cotton ; but the manufactures are imperfect, and the sciences little cultivated. Besides the Malays, several languages are spoken, which seem however to have a manifest affinity amongst themselves, and with that widely diffused speech which may be called the Polynesian, as it is diffused through innumerable islands in the Pacific. Even the rudest tribes of Sumatra and the other Asiatic isles, as far as the utmost bounds of Polynesia, display a certain degree of civilization. The panjeren or prince presides over many magistrates ; but his government is limited, his power being confined by his poverty. Laws are unknown, the chiefs rendering judgment according to customs. Most crimes are compensated by money, murder itself not excepted. The difficulties attending marriage form an exception to the general customs of uncivilized countries, and the general chastity seems remarkable. The celebration is commonly in the balli, or village hall, and is accompanied with dances and songs. Combats of cocks and quails are among the most favorite amusements, together with dances, dice, and other games. The use of opium is extensive, but rarely leads to other excesses. What is called a muck, by the natives *mongamo*, rather proceeds from revenge, or a sense of oppression, than from intoxication. The Christian religion is unknown in Sumatra, the missionaries having unaccountably neglected this large island. The natives of Sumatra and the other Malay islands, are of three casts ; Pagans, Mahometans, and Christians. The Pagans generally inhabit the interior of the islands. The barbarism of these Pagans almost exceeds belief. Marsden, in his history of Sumatra, informs us that they kill and eat each other. And the researches of Dr. Leyden have led to the discovery, that they sometimes eat their own relations, and this not so much to gratify their appetite, as to perform a pious ceremony. When a man becomes aged and infirm, he invites his children and friends to come and eat him. He ascends a tree, round which his relations and friends assemble, and join in a funeral dirge, the import of which is, "The season is come, the fruit is ripe, and must descend." After which the victim descends, and is eaten by his children.† The kingdom of Acheen in the N. W. extremity of the island carries on a considerable trade with the coast of Coromandel. The natives are more stout and tall, and of a darker complexion than the other Sumatrans.

Several small isles encompass Sumatra. *Banca* is particularly

* Marsden, 127.

† Buchanan's Researches.

celebrated for its tin.* Of Billeton little is known; nor of the isles that lie between Sumatra and Malacca called Pitti, and other names, with the common addition of *Pulo*, which in these seas appears to imply an island, being a Malay term.

The *Nassau* or *Poggy* isles, lie off the W. coast of Sumatra, distant 20 or 30 leagues. The northern extreme of the northern island is in lat. 2° 18' S. and the southern extremity of the southern island is in lat. 3° 16' S. These are separated by a narrow passage in lat. 2° 40' S. lon. 100° 43' E. The islands rise into rough hills and mountains, exhibiting strong marks of some powerful convulsion. Excellent timber is found to the summit of the mountains. The tree called Bintangoor or Pohoorn is of sufficient size for the lower masts of the largest ships. The Jago, cocoa nut, and bamboo, are plenty. Pine apples, magnostans, and plantains, are common. The woods are impervious to man, inhabited by a few red deer, hogs, and monkeys. Pork and fish are a favorite food with the islanders. Their language, their manners, and character are very different from their neighbors on Sumatra. The two principal islands have about 1400 people, divided into small tribes, each occupying a stream of water. Their houses are of bamboos, raised on posts: the under part is inhabited by hogs and poultry. Their clothing is a piece of coarse cloth made of bark, worn round the waist. Beads and other ornaments are worn. They file, or grind their teeth to a point. Their color is brown; their stature seldom exceeds 5 feet and a half. They live together in great harmony, believe in God and a Providence. A fowl or hog is sometimes sacrificed to avert distress, but they have no stated religious worship. Omens of good or ill fortune are drawn from appearances in the entrails of their victims. Their government is democratic, the whole village assemblies to try a criminal. Estates descend to the males. When a thief cannot make restitution, he is punished with death. A murderer is delivered to the relations of the deceased, who may put him to death. Marriages are settled by the parents; when the bride is taken home, a hog is generally killed, and a feast made. Polygamy is not tolerated. In case of adultery, when the wife is the offender, the husband may seize all the effects of the paramour, and punish his wife by cutting off her hair. When the husband offends, the wife may quit him. The general custom of tatooing themselves, and the manner of their disposing of their dead, bear a striking resemblance to that of the Otaheitans.†

Java is not only an extensive island, about 650 miles in length, by about 100 of medial breadth, but is remarkable for the city of Batavia, the celebrated capital of the Dutch possessions. This island, like the former, abounds with forests, and presents an enchanting verdure. It is also intersected by a ridge of mountains,

* The industrious translator of Stavorinus, vol. i. p. 357, says that these mines were only discovered in 1710 or 1711, and though the Dutch receive about three millions of pounds weight, the vein seems inexhaustible.

† Asiatic Researches.

like a spine pervading its length.* Batavia is strongly fortified with walls, and a citadel towards the sea. There are many canals about four feet in depth, and the town is large, and well built of stone. This metropolis of the oriental archipelago presents many nations and languages; and the Chinese constitute the greater part of the inhabitants, being contented for the sake of gain to forget the tombs of their ancestors, and the laws of their country against emigration. The Malay language, the French of the east, is here universally understood. The streets are planted with large trees, which practice, with the Dutch canals, probably contributes to the unhealthiness of this spot. The heat is not so intense, considered in itself, being between 80 and 86°, as from the low situation of the town, and the murky exhalations from the bogs, canals, and a muddy sea, whence from nine o'clock till four it is impossible to walk out. The sun being nearly vertical, rises and sets about six throughout the year; but the nocturnal repose is infested by moskitos. In the evening, from six to nine, parties are formed, and intemperance assists the poison of the climate. The water is also of a bad quality. The air is so unwholesome, from fetid fogs and other causes, that dysenteries and putrid fevers destroy prodigious numbers; and of three settlers it is rare that one outlives the year. The rainy season begins with December, and lasts till March. Crocodiles abound in the rivers, as in most of the oriental isles. Java is divided into three or four principalities, the chief being the emperor of Surikarta. The products resemble those of Sumatra; and the existence of the poisonous tree, which has supplied Dr. Darwin with a highly poetical description, appears to be completely confuted. This island was captured by the British, August, 1811.

The small isle of MADURA, on the N. of Java, had its independent prince, whose sufferings under the tyranny of the Dutch have been related by Mr. Pennant.† The Dutch phlegm seems to have led them to greater cruelties than the fanaticism of the Portuguese or Spaniards; and it is to be regretted that the English had not retained for some years the possession of the Dutch settlements, to convince the Batavians, by example, that conquests may be better maintained by lenity than by sordid cruelty. The isle of BALLI seems only remarkable for furnishing slaves, cotton, yarn, and pickled pork.‡ It has 600,000 inhabitants, who are pagans, black and addicted to war.

Of LOMBOK, SUMBAVA, and FLOREZ, little is known. Timor was discovered in 1522 by the companions of Magalhaens, who found in it alone the white sandal wood.§ The Portuguese, after a long struggle, effected a settlement; but were expelled by the Dutch in 1613, who regard this isle as a kind of barrier of the spice trade. Timor is nearly 200 miles in length, by 60 in breadth;

* Thunberg, ii. 213. For a tolerable map of Java see the voyage of Stavorinus, 1798, v. i. p. 313, where there is also a long and minute description of the Island.

† Outlines, iv. 31. See, ib. 28. the massacre of 12,000 Chinese in 1740.

‡ See Forrest, 170.

§ Premier Voyage au tout du monde par Pigafetta. Paris, an 9, p. 213, 214.

and the inhabitants are esteemed the bravest in the Oriental Archipelago. It was captured by the British in 1811.

II. BORNEO.

THIS island is reputed the largest in the world ; and even after recent discoveries seems only to yield to New Holland, which, as it rivals Europe in size, may more properly be regarded as a continent. Borneo seems clearly to be the Greater Java of Marco Polo, which he says is 3000 miles in circuit, as it is about 900 miles in length, by 600 in its greatest breadth, containing about 313,500 square miles.*

The interior parts of the great island of Borneo are little known, though a considerable river flows from the centre of the country almost due south, forming the harbor of Bender Massin ; and the names of several villages on the banks are laid down by D'Anville. "The far greater part of Borneo, next to the sea, especially the northern side, consists of swamps, covered with forests of trees of numberless species and great sizes, which penetrate for scores of miles, towards the centre of the island. The unstable muddy flats are divided by rivers, which branch into multitudes of canals, and are the only roads into the interior parts. Lofty mountains are said to rise in the middle of the island : many are volcanic, and often occasion tremendous earthquakes."† This island has five millions, some say six millions inhabitants.‡ The houses are often built on posts fixed in rafts, which are moored to the shore, and may be moved from place to place according to the convenience of the inhabitants. The coasts are held by Malays, Moors, Macassars from Celebez, and even Japanese. The natives in the interior are blacks, with long hair, of a middle stature, feeble and inactive ; but their features are superior to those of negroes. European settlements have been unsuccessful, the adventurers having been massacred. Pepper abounds in the interior country, with the gum called the dragon's blood, camphor, and sandal wood. Edible birds' nests are abundant. Gold is found in the interior country ; where there are also said to be diamonds, but inferior to those of Golconda. The Ourang Outang abounds. The natives are called Biajos, but their language has not been explained ; they are said to offer sacrifices of sweet scented wood to one supreme beneficent deity ; and the sentiments of piety, or in other words, of delightful gratitude, are accompanied by laudable morals. The Biajos come down the great river of Banjar to the port of Masseen in rude boats, with gold dust, and other articles, the Moors, called Banjareens, being the factors. These Biajos are tattooed blue, with a small wrapper about the loins. The chiefs extract one or two of the fore teeth, substituting others of gold ; and strings of the teeth of tigers, a real badge of knighthood, or courage, are worn round the neck. The town, called Borneo, on the N. W. consists of about three thousand houses, floating as above

* Hassel.

† Pennant's Outlines, iv. 52.

‡ Hassel and Bruns.

described ; it was greatly frequented by the Chinese, who probably continue to be the chief traders to Borneo.

This large island is surrounded with many small isles which, from their relation to this comparative continent, may be termed Bornean islands. Such is the group of *Sooloo* in the N. E. ; of which Mr. Dalrymple, who visited them, has given a good account. They are rich in pearls, for which they were noted in the time of Magalhaens. The chief isle is thirty miles by twelve : the natives rather polished, the government being vested in a sultan, for the Mahometan religion extends thus far.* The isle of *Tawee* lies between the Sooloos and Borneo. At the northern extremity is *Banguey*, not far from *Balabac*, the most S. W. of the Philippines ; and *Balambangan*, remarkable for a settlement attempted by the English in 1773, but evacuated either on account of the unhealthy climate, or of a Dutch invasion. To the W. of Borneo are the groups of *Natuna* and *Anamba* little visited or known ; an observation applicable also to several isles in the S. of Borneo ; but *Pulo Laut*, which by D'Anville is represented as an isle, is by later discoveries attached to the continent of Borneo.

III. THE MANILLAS, OR PHILIPPINE ISLANDS.

This large group was discovered by Magalhaens in 1521, who called them the archipelago of St. Lazarus ; but they were afterwards styled the Philippines, in honor of that infamous tyrant Philip II. of Spain. They contain 3,800,000 inhabitants.†

LUZON is the largest and most important of these isles, being more than seven degrees, or near 500 miles in length, by about 100 of medial breadth. The jealousy of the Spaniards has prevented the acquisition of precise knowledge concerning this important island, which is pervaded in its length by a chain of high mountains towards the east. Gold, copper, and iron are among the certain products ; and the soil is reported to be uncommonly fruitful. The natives, who are of a mild character, are called Tagals, like all those of the Philippines, and seem of Malay origin.‡ They are tall and well made, wearing only a kind of shirts with loose drawers, but the dress of the women is chiefly a large mantle, and their black and beautiful hair sometimes reaches the ground, the complexion being a deep tawny. The houses are of bamboo covered with palm leaves, raised on pillars to the height of eight or ten feet. The chief food is rice, and salted fish. There are many lakes in the isle of Luzon, the most considerable being that which gives source to the river of Manilla. Several volcanoes occur, and earthquakes are not unknown. The cotton is of peculiar beauty ; and the sugar cane and cocoa trees are objects of particular culture. The city of Manilla is well built and fortified, but a third part is occupied by convents : the number of Christian inhabitants is computed at 12,000. Between this city and Aca-

* See also the Voyages of Sonnerat and Forrest. † Hassel. ‡ Sonnerat ii. 108.

pulco, nearly in the same parallel on the W. of Mexico, was conducted a celebrated commerce through a space of about 140 degrees, or about 8400 g. miles, more than one third of the circumference of the globe. The Manilla ships, or galleons, were formerly of great size, but latterly smaller vessels have been used. The city of Manilla was taken by the English in 1762. The Chinese were here numerous till the beginning of the 17th century, when the Spaniards committed a terrible massacre of that industrious people. In 1769 it is said that they were again expelled from all these isles, by the bigotry of the governor: since which time there has been a great decline in industry and produce.

Next in size is *Mindanao*, a beautiful and fertile island, the chief Spanish settlement being at Sambuang in the S. W.* This island is in general mountainous; but the vales consist of a rich black mould, watered with the purest rivulets. The Lano is a large inland lake, about 60 miles in circumference. Horses and buffaloes have here multiplied to a surprising degree. In the south there is a volcano of constant eruption, which serves as a sea mark.

The other chief Philippines are *Pularwain*, *Mindoro*, *Pani Buglas* or *isle of Negroes*, *Zebu*, *Leyt*, or *Leita*, and *Samar*. On the E. of Zebu is the small isle of *Mactan*, where the celebrated navigator Magalhaens was slain. The other little islands might be counted by hundreds. In general this grand and extensive group presents many volcanic appearances; such as lava, volcanic glass, sulphur, and hot springs. These isles present wild boars, deer, and useful animals of various kinds; and among vegetables the bread fruit must not be forgotten, which first appears on the eastern coasts of Sumatra, and thence extends its benefits through innumerable islands in the Indian and Pacific oceans.

IV. THE CELEBEZIAN ISLES.

Celebez is an isle of great and irregular length, more than 600 miles, but divided into various portions by great bays, so that the breadth is commonly not above 60 miles, containing about 92,000 square miles, and 3,000,000 inhabitants,† lon. from 116 to 124 E. lat. 1° 30' to 5° 30' N. This island is lofty and mountainous, especially towards the centre, and there are several active volcanoes. Though the Asiatic isles abound in sublime and beautiful scenery, this is depicted as exceeding them all.‡ Rivers abound, rising in the high mountains, and precipitating down vast rocks, amidst a sylvan scene of lofty and singular trees. The Portuguese obtained a settlement near Macassar in the S. W. being favored by the king of that region, but were expelled by the Dutch in 1660, who continue to control the island, the Chinese alone being permitted to trade. The natives, commonly called

* Sonnerat, ii. 116. For an ample and curious account of this island the reader may consult Forest's Voyage to New Guinea. The Haraforas, or black natives, are sold with the land.

† Hassel.

‡ Pennant iv. 86.

Macassars,* often degrade their courage in the quality of free-booters, attacking vessels with surprising desperation, and often with lances, or arrows poisoned with the juice of the notorious tree called upas. Their houses are raised on pillars, as usual, on account of the rainy season, or W. monsoon, from November till March. The Celebezian group might aptly be termed the Isles of Poison, being full of poisonous trees and plants ; though the noted upas be exaggerated and ascribed to Java, where it seems less known. Nature has thus contrasted the salutary productions of the spice islands with the most pernicious proofs of her power. This large island having been, like Borneo, little explored, there is a great deficiency in its natural history. The inhabitants are said to cultivate great quantities of rice.

Around Celebez are many small isles, as *Sanguy* in the N. the *Shullas* and *Peling* in the E. with *Boutan* and *Sala* in the S. and some of smaller note in the W. Even the smallest isles are mostly inhabited, and governed by chiefs. In *Sanguy* and some others there are small Dutch garrisons, as advanced guards to protect the Spice islands. *Boutan* is probably still ruled by a Mahometan sultan.

V. THE SPICE ISLANDS, INCLUDING THE MOLUCCAS.

THE Moluccas, originally and strictly so termed, are only five small islands on the W. of Gilolo, namely TERNAT, TIDORE, MOTIR, MAKIAN, and BAKIAN or BATCHIAN :† but as the kings of the Moluccas have possessed territory in Gilolo and other adjacent isles, and as the term *Moluccas* is considered as synonymous with that of *Spice Islands*, the appellation has been extended. The Moluccas of D'Anville include all the islands in the oriental Archipelago, except those of Sunda and the Philippines ; but this extension is objectionable, as leading to vague ideas and confused description ; and it seems preferable to include under the name of Spice Islands those from Mortay in the N. to Banda in the S. and from Mysol in the E. to Bouro and Oubi in the W. Thus the chief Spice Islands will be GILOLO, CERAM, and BOURO, with MORTAY, OUBI, MYSOL, BOURO, that of AMBOYNA, and the group of BANDA, with such small isles as approximate nearer to these than to the Celebezian group, or Sumatran chain. In this description are specially included the five celebrated isles, originally and peculiarly termed the Moluccas.

GOLILO is of considerable extent ; but in irregularity of form similar to Celebez. The length is about 230 miles ; the breadth of each limb seldom above 40. The shores are low : the interior rises to high peaks. Gilolo is said to have been once governed by one sovereign, a sheref from Mecca ; but the sultans of Ternat and Tidore seem now to share this large isle between them ;‡ a

* The most powerful people are the *Bonians*, on the bay of Boni, called *Buggasses* by English seamen, and by other nations *Bouguinese*. Stavorinus, ii. 181.

† Pigafetta, 167.

‡ Pennant, iv. 193.

circumstance which adds to the propriety of including Gilolo in the same description with the Moluccas. One of the chief towns is Tatary, situated on a point or small promontory of the eastern limb, faced with precipices, so as to be only accessible by ladders. This isle abounds with oxen, buffaloes, goats, deer, and wild hogs ; but the sheep are few. The bread fruit is frequent in Gilolo, with the sago tree. The natives are industrious, particularly in weaving, but their exertions are suppressed by Batavian jealousy.

CERAM is another island of considerable size, being about 190 miles in length by 40 in breadth ; low towards the shore, but with inland mountains. Mr. Forrest specially mentions that Ceram produces clove trees ; and there are large forests of the sago tree, which forms a considerable article of export : yet this large island has been little explored, and is almost unknown.

As in geographical description the size of an island is a leading feature, the next mentioned must be BOURO, about 90 miles in length, by 50 in breadth. This isle was nominally subject to the king of Ternat ; but in 1660 the Dutch built a fort, and, though they burned the exterior woods, seem to have improved the industry of the inhabitants.* The civet weasel is found here, and the curious hog called babiroussa. The isle of Bouro rises suddenly from a deep sea, being encompassed as with a wall. The interior mountains are so lofty, that they may sometimes be descried at the distance of 28 leagues. Green ebony, and a kind of iron wood, are mentioned among the trees ; and it is probable that the clove, and perhaps the nutmeg, defy, in the mountain recesses, the wild avarice of man.

Of the other large islands Bakian or Batchian will be described with the Moluccas strictly so called. Of MORTAY, MYSOL, (Mixoal or Michoal,) and OUBI, little is known. Mortay is a beautiful isle, but thinly inhabited, though full of sago trees, which are cut by the people of Gilolo ; and is subject to the king of Ternat. MYSOL, the most eastern of this group, is of a triangular shape, with a bold shore. The villages are built in the water upon posts ; and there are picturesque forests visited by the birds of paradise, which seem to migrate from Papua, and are caught in considerable numbers. These romantic and beautiful birds strictly belong to Papua, or New Guinea, but their flight extends over most of the Spice Islands, where they always descend as from heaven, and, as the natives believe, float in aromatic air. OUBI abounds in cloves, and the Dutch have a small fort on the west side : but the inhabitants are chiefly fugitive slaves from Ternat.

But the most celebrated and important islands of this group remain to be described. The MOLUCCAS, strictly so called, in the western extremity ; and AMBOYNA and BANDA in the south. The little, or proper Moluccas, as already mentioned, are TERNAT, TIDORE, MOTIR, MAKIAN, and BATCHIAN. In 1510 they were visited by Portuguese navigators from the west ; and the fame of the discovery was one of the chief inducements to the first cir-

* Pennant, iv. 174.

cumnavigation of the Spaniards, conducted by Magalhaens, a Portuguese commodore. These two great maritime nations afterwards contested this precious property ; but the Moluccas were finally resigned to the Portuguese, who were supplanted by the Dutch about the year 1607. The English also claiming this opulent commerce, a treaty was signed in 1619, declaring the Moluccas, Amboyna, and Banda, common to both : the English to have one third of the produce, and the Dutch two thirds ; each contributing a similar proportion to defend the islands from invaders.* But in the short course of three years the Dutch, actuated by their insatiable avarice, determined, by the most diabolical means, to free themselves from all competitors. They forged a plot of the English against their lives and liberties, and put them to death by the most exquisite tortures.

The clove is said to have abounded particularly in Makian, but the growth was afterwards confined by the Dutch to Amboyna. The nutmeg specially flourished in the group of Banda ; and the Romans appear to have known the clove, but not the nutmeg, which was probably brought to Europe by the Mahometans. The largest of the little Moluccas is BATCHIAN, being governed by a sultan, who is likewise sovereign of Oubi and Ceram, with Goram, a little isle S. E. of Ceram, reputed the most eastern boundary of the Mahometan faith. This monarch has a pension from the Dutch, either for the destruction or supply of nutmegs, but is otherwise little subservient. Batchian rises into woody hills ; and on the shores, as in most isles of this archipelago, there are prodigious rocks of coral, of infinite variety and beauty. MAKIAN is a small isle at a greater interval, to the N. of Batchian, than appears between the other Moluccas, and rises like a high conic mountain from the sea. This was regarded as the chief Dutch settlement before Amboyna became the metropolis of the Moluccas. Next is MOTIR, formerly, said to be the seat of Venus and voluptuousness. The most distinguished of the proper Moluccas are TIDORE and TERNAT. While Portugal was united to Spain the Dutch were defeated near Tidore in 1610 by the Spanish admiral Sylva ; but by the assistance of the king of Ternat the Batavians seized the fort. In Tidore there are 25 mosques ; and the sultan, as already mentioned, possesses also the south of Gilolo, and claims tribute from Mysol.

TERNAT is the most northern and most important of the Moluccas, though it scarcely exceed 24 miles in circumference. The sultan controls Makian and Motir, with the north of Gilolo, Mortay, and even some Celebezian isles, and part of Papua, whence he receives a tribute of gold, amber, and birds of Paradise. In 1638 the Batavians formed an alliance with the king of Ternat and the lesser princes, which has been repeatedly renewed ; but garrisons are established to enforce the observance, and the sultans of Ternat and Tidore are watched with great attention. Ternat consists chiefly of high land, abounding with streams,

* Rymer's *Fœdera*, xvii. 170.

which burst from the cloudy peaks : and there is a volcano which displayed great force in 1693. The chief quadrupeds, are goats, deer, and hogs, and the birds are of distinguished beauty, particularly the kingfisher, clothed in scarlet and mazareen blue, called by the natives the Goddess. In Ternat the Boa-serpent is sometimes found, of the length of thirty feet ; and by its power of suction and constriction is reported sometimes to swallow even small deer.

Equally distinguished are the most southern spice islands of AMBOYNA and BANDA, cloves being now restricted, so far as Dutch avarice could effect, to Amboyna, and nutmegs to Banda. The governor of Amboyna makes an annual progress throughout the Spice Islands, to see that treaties are observed, and suppress any new object of jealousy. AMBOYNA was discovered by the Portuguese about 1515, but was not seized till 1564 ; and was conquered by the Dutch about 1607. This celebrated isle is about 60 miles in length from N. to S. and on the west side there is a large bay, which divides it into two limbs or peninsulas. On the eastern side is another bay, with a bad harbor, where the Portuguese erected their chief fortress Victoria. The town of Amboyna, the capital of the isle, stands near the S. W. extremity and is neatly built ; the houses, on account of the frequent earthquakes, seldom exceed one floor. The face of this island is beautiful, woody mountains and verdant vales being interspersed with hamlets, and enriched by cultivation.* The clove tree grows to the height of about 40 or 50 feet, with spreading branches and long pointed leaves. In deep sheltered vales some trees will produce 30 pounds weight annually, the chief crop being from November to February. The soil is mostly a reddish clay, but in the vales blackish and sandy. When Amboyna was recently seized by the English,† it was found, with its dependencies, to contain 45,252 souls, of which 17,813 were Protestants, the rest Mahometans, except a few Chinese and savages. The Dutch are tolerably polished, this being the next settlement to Batavia in wealth and consequence. The natives cannot be praised, they differ little from other Malays ; and when intoxicated with opium will commit any crime. The dress is a loose shirt, or frock, of cotton cloth ; and the chiefs are called rajahs. Cattle, grain, &c. are imported from Java. The Dutch discouraged the growth of indigo, lest the natives should become rich and rebellious ; but the sugar and coffee are excellent, and among many delicious fruits is the mangosteen of Hindostan. About eleven years ago nutmegs were permitted to be cultivated in Amboyna, Banda not furnishing a sufficient supply. The chief animals are deer and wild hogs, and among the birds is the cassowary. The most curious woods are brought from Ceram.

* An account of the Spice Islands, since they have been in the possession of Great Britain. Asiatic Register, 1800, p. 200. There was a most violent earthquake in 1755.

† The Islands of Amboyna and Banda were taken without resistance in February and March, 1796, by the English admiral Rainier.

BANDA, or LANTOR, is the chief isle of a group which comprises six or seven others ; it does not exceed 8 miles in length, W. to E. and the greatest breadth at its eastern extremity may be 5 miles. The nutmeg tree is the principal object of cultivation in these isles ; and flourishes not only in the rich black mould, but even amidst the lavas of Gonong, which is the highest isle, the summit being 1940 feet above the sea. When the English seized these isles in 1796, the annual produce was about 163,000 pounds of nutmegs and 46,000 pounds of mace.* The nutmeg tree grows to the size of a pear tree, the leaves resembling those of the laurel, and bears fruit from the age of ten to one hundred years. The nutmeg, when ripe on the tree, has both a very curious and beautiful appearance : it is about the size of an apricot, and nearly of a similar color, with the same kind of hollow mark all round it ; in shape it is somewhat like a pear : when perfectly ripe the rind over the mark opens, and discovers the mace, of a deep red, growing over and covering in part the thin shell of the nutmeg, which is black.†

The ground being chiefly occupied with these precious plantations, cattle, grain, &c. are imported from Batavia ; and the Chinese merchants carry European articles even to Papua or New Guinea. The inhabitants of the Banda isles were found to be 5763. The English were expelled from Lantor, and Rohn, or Pulo Rohn, prior to the massacre of Amboyna ; but seized the whole Spice Islands in 1796, and restored them to their Batavian masters by the treaty with France, 1801. In 1810, they were again taken by the British, in whose possession they now remain.

AUSTRALASIA.

AUSTRALASIA, as already explained, contains the following countries :

1. The central and chief land of New Holland, with any isles which may be discovered in the adjacent Indian ocean, twenty degrees to the W. and between twenty and thirty degrees to the E. including particularly all the large islands that follow :
2. Papua, or New Guinea.
3. New Britain and New Ireland, with the Solomon Isles.
4. New Caledonia, and the New Hebudes.
5. New Zealand.

* The hurricane and earthquake, 1778, almost annihilated the nutmeg trees in Banda, so that the Dutch have become the dupes of their own avarice. From 1796 to 1798 the English East India Company imported 817,312 lb. cloves, 93,732 lb. nutmegs, 46,730 lb. mace, besides private trade, amounting to about a third part of the above. *Stavorinus*, ii. 418.

† *Asiatic Register*, 1800, p. 216.

6. The large island called Van Diemen's Land, recently discovered to be separated from New Holland by a strait, or rather channel, called Bass's strait.

1. NEW HOLLAND.

SOME suppose that this extensive region, when more thoroughly investigated, will be found to consist of two, three, or more vast islands, intersected by narrow seas. However this be, the most recent and authentic charts still indicate New Holland as a country fully entitled to the appellation of a continent. The length from E. to W. is about 43 degrees of longitude, in the medial latitude of 25° , that is about 2730 miles. The breadth from N. to S. extends from 11° to 39° , being 28 degrees, 1960 miles. Europe, the smallest of the ancient continents, is supposed to be about 3300 miles in its utmost length, and its greatest breadth 2350. New Holland, appears therefore, to be a quarter less than Europe. But the proximity of so many large islands recompenses this defect; and the whole of Australasia will probably be found greatly to exceed the European continent. It must at the same time be remembered, that New Holland may be discovered to consist of two or more islands, so that Australasia is not admitted as a new continent, but merely as a new division of the globe; in which view this and Polynesia may be termed maritime divisions, while the four ancient quarters are strictly terrene.

Although the northern parts of Papua were probably not unknown to the Chinese, yet there is no evidence, that they had discovered New Holland; there is therefore room to believe that the first civilized people to whom it was disclosed were the Spaniards or Portuguese, the earliest European navigators in this portion of the globe. An ancient map now lodged in the British museum has been thought to evince, that a considerable portion of the coast, now called New South Wales, was known to the Spaniards or Portuguese; but the precise epoch of the map or discovery seems uncertain.

The Portuguese being supplanted by the Dutch, the latter are regarded by the learned president Des Brosses, as the chief discoverers of Australasia, between the year 1616 and 1644.* The first discovery he dates in the month of October 1616, when the western extremity was explored by Hartog. The northern part, called *Diemen's Land*, was disclosed by another Dutch navigator, named Zeachen, who bestowed the appellation in honor of Antony Van Diemen, governor general in the East Indies. In like manner Carpenteria was named from general Carpenter, being discovered in 1628.

In 1642, that celebrated navigator, Tasman, leaving Batavia with two ships, performed almost a circuit of Australasia, and discovered the southern land of *Van Diemen*, with New Zealand, and

* Des Brosses, i. 426.

some isles of less consequence. It would be foreign to the present purpose to detail the other discoveries, which preceded the voyages of Cook, in 1768, 1772, and 1776, which, from the superior amplitude and accuracy of the details, may be said to amount to a new discovery.

The eastern coast having been carefully examined by Cook, and justly appearing of great importance, was formally taken possession of in the name of the king of Great Britain, 1770. On the close of the American war, it being difficult to select a proper place of transportation for criminals sentenced to that punishment by the laws of their country, this new territory was at length preferred, in 1786, and the first ship sailed from Spithead on the 30th January 1787, and arrived on the 20th of the same month in the following year.* Botany Bay being found to be a station of inferior advantages to what were expected, and no spot appearing proper for the colony, it was immediately resolved by Governor Phillip to transfer it to another excellent inlet, about twelve miles farther to the north, called Port Jackson, on the south side of which, at a spot called Sidney Cove, this settlement is now fixed. Port Jackson is one of the noblest harbors in the world, extending about fourteen miles in length, with numerous creeks or coves.

Difficulties with regard to subsistence and some unexpected misfortunes attended the new colony, the sheep being stolen, and the cattle wandered into the woods. For a minute account of the progress of this interesting colony till 1797, the reader may consult the work of Mr. Collins, who held an eminent situation in the establishment.† A space of about 50 miles around the colony had then been explored, and two rivers called Nepean and Hawkesbury, and some mountains, had been discovered. The cattle were found grazing in a remote meadow, in 1795, after they had been lost for seven years, and had increased to a surprizing degree. The most recent accounts seem to authenticate the flourishing state of the colony. The mode of cultivation has been improved, coal and rock salt discovered; and there is room to expect that this wide territory will not be found deficient in the usual riches of nature.

Division.] The name of Cumberland county is given by the government to the settlement at Sidney Cove. It is about 50 miles in length, and 30 in breadth; bounded W. by Caermarthen and Lansdown Hills; N. by Broken Bay, and S. and S. W. by Botany Bay. The chief place of settlement, is at Sidney Cove, near the centre, where a town has been regularly laid out, and built. The principal streets are 200 feet wide. The climate is said to be equal to the finest in Europe.

Inhabitants.] These historical outlines being premised, it will be proper to offer a brief and indeed necessarily defective description of this new continent, as it is conceived to be in its original state. From the accounts of various navigators, there is room to infer that this extensive tract is peopled by three or four races of

* Collins, i. p. ii.

† For later information, the reader is referred to Peron's voyage to Australasia.

men, those observed in the S. W. being described as different from those in the N.* and both from those in the E. with whom alone we are intimately acquainted. These are perhaps in the most early stage of society which has yet been discovered in any part of the globe. They are merely divided into families, the senior being styled Be-ana, or Father. Each family or tribe has a particular place of residence, and is distinguished by adding *gal* to the name of the place ; thus the southern shore of Botany Bay is called Gwea, and the tribe there Gwea-gal. Another tribe numerous and muscular, has the singular prerogative of exacting a tooth from young men of other families, the sole token of government or subordination. No religion whatever is known, though they have a faint idea of a future existence, and think their people return to the clouds, whence they originally fell. They are of a low stature, and ill made ; the arms, legs, and thighs, being remarkably thin, perhaps owing to their poor living on fish, the only food of those on the coast, while a few in the woods subsist on such animals as they can catch, and climb trees for honey, flying squirrels, and opossums.† The features of the women are not unpleasant, though approaching to the negro. The black bushy beards of the men, and the bone or reed, which they thrust through the cartilage of the nose, gives them a disgusting appearance : which is not improved by the practice of rubbing fish oil into their skins, as a protection from the air and moskitos, so that in hot weather the stench is intolerable. They color their faces with white or red clay. The women are marked with the loss of the two first joints of the little finger of the left hand, as they were supposed to be in the way when they coiled their fishing lines.‡ It is however not improbable that this practice, and the extraction of a tooth from the boys, may be mere initiations, rude lessons that they may learn to bear pain with apathy. The children are seldom disfigured, except by accidents from fire ; and their sight is surprisingly acute. Some are nearly as black as African negroes, while others exhibit a copper or Malay color, but the hair is long, not woolly like the African. Their noses are flat, nostrils wide, sunk eyes, thick brows and lips, with a mouth of prodigious width, but the teeth white and even. " Many had very prominent jaws ; and there was one man who, but for the gift of speech, might very well have passed for an ourang outang. He was remarkably hairy ; his arms appeared of an uncommon length ; in his gait he was not perfectly upright ; and in his whole manner seemed to have more of the brute, and less of the human species about him, than any of his countrymen."§

* Yet the description of Dampier, who visited this part in 1688, presents a great similarity with that of the natives in the colony near Port Jackson. (Vol. i. p. 462)

† Collins, i. 550.

‡ Patterson, in his travels in Africa, tells us that he met with a tribe of Hottentots, near Orange River, all of whom had lost the first joint of their little finger : the reason they gave for cutting it off was, that it was a cure for a particular sickness to which they were subject when young. It would be a curious coincidence, should it be discovered that the natives of New-Holland do it for any similar reason.

§ Collins, i. 554.

The huts are most rudely constructed of the bark of trees, in the form of an oven, the fire being at the entrance. Here they sleep promiscuously, if not interrupted by their frequent enmities and assassinations. Fish are killed with a kind of prong, or taken by the women, with lines of bark and hooks of the mother of pearl oyster, rubbed on a stone, till the proper form be obtained. The fish are often broiled on a fire laid on sand in the canoe. Beasts are taken in a kind of toils. Caterpillars and worms are likewise articles of food. The canoes are made of bark, extended on a timber frame.

These poor savages are the abject slaves of superstition, believing in magic and witchcraft and ghosts ; they have also spells against thunder and lightning, and pretend to foretell events by the meteors called falling stars. They have not only personal property in their weapons and fishing tackle, but some are supposed hereditary proprietors of certain spots, perhaps assigned as rewards for public services, or acts of great bravery. They have names for the sun and moon, some few stars, the Magellanic clouds, and the milky way. Young people are buried, but those who have passed the middle age are burnt ; a rude tumulus being erected by way of tomb.

Language.] Of the language Mr. Collins has given an ample vocabulary, and it is reported to be grateful to the ear, expressive and sonorous, having no analogy with any other known language ; but the dialects of the various regions seem entirely different. Whether these people be remains of aboriginal tribes from the most southern extremities of Asia, or have passed from Madagascar and the eastern shores of Africa, are matters of future discovery and investigation.

Climate and Seasons.] From its situation, on the southern side of the equator, the seasons are like those of the southern part of Africa and America, the reverse of those in Europe ; the summer corresponding with our winter, and the spring with autumn. Mr. Collins found the weather in December very hot, but the climate was allowed to be fine and salubrious. The rains were heavy, appearing to fall chiefly about the full and change of the moon ; and at intervals there were storms of thunder and lightning. In Norfolk island there is what may be called a rainy season, from February to August. As the south is in this hemisphere the region of cold, there must be great difference in the temperature of this wide continent ; which may also be affected as usual by chains of mountains, and other circumstances yet undiscovered.

Face of the Country.] It would be idle to attempt any delineation of the general aspect of this country. The small portion known seems hilly, but not mountainous, partly covered with tall trees clear from underwood ; which last however covers extensive tracts towards the shores, in which large swamps also occur.* The soil around Botany Bay is black and fat, and fertile

* Pennant's Outlines, iv. 108 ; but this excellent naturalist seems prejudiced against the country and the colony.

of plants, whence the name arose ; but these favorable appearances were counteracted by great disadvantages ; it is to be hoped that when experience has indicated the proper means, this may be rendered a productive country.

Rivers, Lakes, and Mountains.] Concerning the rivers, lakes, and mountains of New Holland there is little information. Nepean river in New South Wales, is 34 miles S. W. of Port Hunter, and 46 from the town of Paramatta. The Paramatta river passes the town of this name, which is the residence of the missionary, and is a flourishing place. A chain of mountains is said to run N. and S. between fifty and 60 miles inland, but not easily accessible on account of numerous deep ravines. Basaltic columns often appear ; and in Howe island they rise to such a height as to be visible at the distance of twelve leagues.

Zoology.] This wide country presents a peculiarity in the animals, being mostly of the opossum kind, and leaping habitually upon the hind legs : the chief in size is the Kangaroo. The native dogs are of the chacal kind, and never bark ; they are of two colors, black or white with tinges of red, and some are very handsome.* Among the few other quadrupeds yet described are weazels and ant-eaters, with that singular animal the duck-billed platypus, in which nature seems to delight in transgressing her usual law, the jaws of a quadruped being elongated into the complete bill of a bird. Among the birds are the brown eagle, several falcons, and many elegant parrots ; there are also bustards and partridges, with some pigeons. A new kind of cassowary must not be omitted, said to be seven feet in length :† it is not uncommon, and the flesh tastes like beef. Among the aquatic birds are the heron, and gigantic pelicans. There are also peculiar ducks and geese ; and the black swan is a rare progeny of the new continent. “ It is in size superior to the white. The bill is of a rich scarlet ; near the tip is a small yellow spot. The whole plumage of the most intense black, except the primaries and secondaries, which are white, the eyes black, the feet dusky : it is found in Hawksbury river, and other fresh waters near Broken Bay, and has all the graceful actions of the white kind.”‡

The tortoises, called green turtle, appear on the coast of New Holland. There are several lizards and serpents. Of the fish may be named dolphins, porpoises, and a singular amphibious kind which leaps like a frog, by the help of strong breast fins ; so that nature has not only here blended the bird with the quadruped, but brought fish upon land. The blue crab, of an ultramarine color is of exquisite beauty.

Mineralogy.] As the interior mountains of this region have not been explored, little can be said concerning the mineralogy. In 1797 a ship from Bengal being wrecked on the southern shore, of seventeen men only three reached the settlement, after a journey of eighty days : on their way they discovered immense strata of coal, which may prove far more valuable than mines of gold.§

* Collins, i. 567.

† Pennant, iv. 127.

‡ Ib. 130.

§ Collins, i. 617.

Islands.] Norfolk Island lies in S. lat. 29° 4', E. lon. 168° 12'; at the distance of 1000 miles N. E. Port Jackson, containing 11,000 acres of an excellent soil; it is seven leagues in circumference, discovered by Capt. Cook, in 1774, who observed the flax plant luxuriant here; but the chief produce is spruce pine, which grows to a large size, many of the trees as thick as two men could fathom, very straight and tall. For about 200 yards from the shore, the ground is covered so thick with shrubs and plants, as hardly to be penetrated farther inland. The woods are perfectly clear and free from underwood, and the soil is deep. The island is very hilly. The highest peak, named Mount Pitt, is 1200 feet high. The cliffs round the coast are 240 feet perpendicular. In February, 1788, twenty six persons from the New Holland colony took possession of this island, which was inhabited, with a view to cultivate maize, wheat, and particularly the flax plant, which has since been discovered at Sidney. The settlement was formed on Sidney bay, on the S. side of the island. This settlement, for want of a harbor, was removed to Port Dalrymple, in 1805. Green turtle abound on the shores of this, and of Howe island.

Nephean Island, is opposite Port Hunter, on the S. coast of Norfolk Island. It is a mass of sand, surrounded by a border of hard rocks. The surface is covered with coarse grass, and upwards of 200 fine pines are growing on it.

Middleton's Island, was discovered by Shortland, appeared about six leagues long; the land very high, with a remarkable peak, lon. 159° 5' E. lat. 28° 10' S.

II. PAPUA, OR NEW GUINEA.

THIS country is one of the most interesting in Australasia, as partaking of the opulence of the Moluccas, and their singular varieties of plants and animals. The land of Papua is said to have been first discovered by Saavedra, a Spanish captain, in 1528, who had sailed from Mexico by the command of Cortez, to explore the Spice Islands from that quarter.* Other Spanish navigators enlarged this discovery; and the strait between this country and New Holland was explored by Cook, while the learned President Des Brosses, and even Bougainville, the French circumnavigator, had doubted whether such a passage existed.† This extensive country is still far from being completely investigated, but is conceived to be a vast island, extending from a cape, absurdly styled of Good Hope, but more properly White Point, in the N. W. probably to Cape Rodney in the S. E. a length of more than 1200 miles, by a medial breadth of perhaps 300, and thus far superior in size to Borneo, formerly reputed the largest of islands.

* Des Brosses, i. 159.

† Introduction to Cook's last voyage (by Bishop Douglas, p. xvi.) The reader who wishes for more particular details concerning the progress of discoveries in the Pacific may be referred to the work of Des Brosses, often quoted; and to Mr. Dalrymple's collection of voyages in the Pacific, 1770, 4to. The learned French publication was translated by John Callander, Edin. 1766, 3 vols 8vo, who seems disposed to pass it as an original, under the title of *Terra Australis Cognita*.

Original Population.] On this extensive territory, in a situation so highly favored by nature, and probably enriched with the choicest productions, there is no European settlement. The inhabitants of the northern part are called Papous, whence the name of the country. The traditions bear that they are brethren of the Moluccans, and the language seems to have no affinity with that of New South Wales, but is probably connected with that of Borneo, &c. on the west, and that of New Britain and the isles on the other side, being part of the wide Malay diffusion. The inhabitants are black, and even said to have the woolly hair of negroes; but this last circumstance will probably be discovered, as in New Holland, to proceed from art, and in some parts it would seem that the inhabitants have the true Malay complexion and features. In the interior is a race called Harasoras, who live in trees, which they ascend by a notched pole, drawing it after them to prevent surprise. The appearance of the Papuans and their habitations is grotesque, the latter being built on stages in the water; in which they resemble the Borneans and other nations in the Asiatic isles. The women seem the most industrious in making mats, and pots of clay which they afterwards burn with dry grass, or brush wood; nay they will even wield the axe, while the men are indolent, or preparing for the chace of wild hogs.*

"The aspect of these people is frightful and hideous; the men are stout in body, their skin of a shining black, rough and often disfigured with marks like those occasioned by the leprosy; their eyes are very large, their noses flat, mouth from ear to ear, their lips amazingly thick, especially the upper lip; their hair woolly, either a shining black or fiery red. It is dressed in a vast bush, so as to resemble a mop; they sometimes ornament their hair with feathers of the birds of Paradise; others add to their deformity by boring their noses, and passing through them rings, pieces of bone, or sticks; and many by way of ornament, hang round their necks the tusks of boars. The heads of the women are of less size than those of the men, and in their left ear they wear small brass rings."

The religious tenets of the Papuans have been little examined. They make tombs of the rude coral rock, sometimes with sculptures. The chief commerce is with the Chinese, from whom they purchase their instruments and utensils. Their returns are ambergris, tortoise-shell, small pearls, birds of paradise, and other birds, which the Papuans dry with great skill. Some slaves are also exported, probably captives taken in intestine wars.

The coasts of Papua are generally lofty, and, inland, mountain rises above mountain, richly clothed with woods. The shores abound with cocoa trees, and the whole country seems to have impressed every navigator with delight, and well deserves more cultivated and industrious inhabitants. But by a singular fatality many extensive and beautiful portions of the globe are thinly inhabited by a few savages, while cold and barren provinces are the crowded seats of civilized nations.

* Forrest's voyage to New Guinea. Penant's Outlines, iv. 208.

The natural history of this country is little known, but the zoölogy is striking and romantic. Papua is the chosen residence of the splendid and singular birds of paradise, of which ten or twelve sorts are enumerated by Mr. Pennant. They seem to be chiefly caught in the adjacent isles of Arroo, being supposed to breed in Papua, and reside there during the wet monsoon; while during the dry, or western, they retire to Arroo, migrating in flocks of thirty or forty. During their flight they cry like starlings, but when surprised with a strong gale they croak like ravens, and ascend to the superior regions of the air. They alight on the highest trees, seeming to feed on berries, and according to some on nutmegs and butterflies: and are either shot with blunt arrows, or caught with birdlime, or nooses. The bowels and breast bone being extracted, they are dried with smoke and sulphur, sold for nails or bits of iron, and exported to Banda. Papua also boasts of elegant parrots; while the crowned, or gigantic pigeon almost equals a turkey in size.

Captain Forrest, to whom we are indebted for an interesting voyage in these seas, only visited the harbor of Dory in the northern part of Papua, so that our knowledge of this large island remains extremely imperfect. He observed, at a considerable distance, the mountains of Arfac of a remarkable height. Near the harbor of Dory he found in some little isles abundance of nutmeg trees, and there is room to infer that the land of Papua is not destitute of the same productions, and may perhaps also boast of cloves.

Some of the small adjacent islands are better known than the main land of Papua. At the N. W. extremity the chief isles are Waijoo, and Salwatti; besides several smaller ones.

Farther to the S. are the Papuan islands of Arroo and Timorlaut.

Waijoo, or Wadjoo, is an isle of considerable size, and is said to contain 100,000 inhabitants. The land is high with lofty mountains, and on the north side are two excellent harbors, Piapis and Offak.*

Salwatti is also a populous island, governed by a raja. The people of these two large islands resemble those of the main land of Papua, being a singular race of horrible appearance, and great ferocity. They live on fish, or turtle, and sago, that tree abounding in Papua, but the substance is chiefly prepared by the people of Waijoo.

Timorlaut is another Papuan island of considerable size, but of which there is no particular account. The Arroo islands appear, in Arrowsmith's chart, divided into five by intervening straits, and, as already mentioned, are the remarkable seats of the birds of paradise. The chief product is sago; and the people make expeditions to the main-land, where they seize captives and sell them at Banda. In political geography the Arroo isles have been considered, since 1623, as belonging to the Dutch East India Company, and subservient to those of Banda.†

* See Forrest's Voyage and the Chart.

† Des Brosses, i. 443.

On the N. of the main land of Papua are the isles of Mysory and Jobi, with several others of smaller consequence ; nor indeed are the discoveries sufficiently complete to trace with precision the northern shores of Papua, or the isles adjacent.

III. NEW BRITAIN, AND NEW IRELAND, WITH THE SOLOMON AND NAVIGATORS' ISLES.

New Britain was first explored and named by Dampier, that navigator having passed a strait, to which his name is given, between this country and Papua. In 1767 Captain Carteret passed through a channel between New Britain and New Ireland, which last is a long slip of land stretching from N. W. to S. E. ; and it is also probable that New Britain may be found to be divided into two or more islands. In these parts the nutmeg tree is found abundant, being perhaps the most remote region towards the east, of that valuable plant. Dampier visited a bay in New Britain, called Port Montague, A. D. 1700, and found the land mountainous and woody, but interspersed with fertile vales and beautiful streams. The country seemed very populous, the natives resembling those of Papua, and navigating their canoes with great skill. The chief product seemed to be cocoa nuts, but there were yams, and other roots, particularly ginger ; and the sea and rivers swarmed with fish. In the main land, and adjacent isles, there are several volcanoes.

Inhabitants.] Captain Carteret found the natives of New Ireland very hostile, having lances headed with flint. Their faces were streaked with white, and their hair dabbed with powder of the same color. They are black, and said to be woolly headed, but without the thick lips or flat nose of the negro. Some of the canoes of New Ireland were ninety feet in length, formed out of a single tree. Bougainville also visited this country, and observed here the pepper plant, while, among the numerous birds, was the great crowned pigeon.

A more ample description is unnecessary, as these countries are far from being completely discovered. The same observation must be extended to what are called the Solomon Islands, which appear to have been discovered by Mendana, who sailed from Lima to the westward in 1575.

The Solomon islands, as laid down in Mr. Arrowsmith's chart of the Pacific, may be considered as a large group, extending from Lord Anson's isle, or the Bouka of Bougainville, in the N. W. to the isle called Egmont by Carteret in the S. E. Some of the islands, towards the centre, seem of considerable size, particularly in length. If these be the Solomon Isles of the Spaniards, it is asserted that they are rich in gold. Some of the natives were of a copper color, others of a deep black, with a wrapper of linen around the waist, while the neck was ornamented with little beads of gold. The canoes were small, two being common-

ly fastened together. In baskets of palm leaves they carry a kind of bread made of roots.*

Navigators Islands, are a cluster of islands in the S. Pacific Ocean. The inhabitants are a strong and handsome race : scarcely a man of them is less than 6 feet high, and well proportioned. The women are delicately beautiful ; their canoes, houses, &c. well constructed ; and they are much more advanced in internal policy, than any other island in this ocean ; lon. 169. W. lat. 14° 19' S.† These islands are the land of the Arsacides of Bougainville.

IV. NEW CALEDONIA, AND THE NEW HEBUDES.

THESE regions were discovered by Captain Cook in 1774 ; but Bougainville in 1768 had sailed through the New Hebudes ; and the most northern is supposed to be the land of the Holy Ghost or Quiros.

New Caledonia is a large island, the southern part of which in particular has been little explored. The natives are said to be a muscular race, of a deep brown complexion, resembling those of New Zealand.

The north western part of this large island was explored by Captain Cook, who says that this district was called Balade. The name of Tee, which in the Society isles implies a guardian spirit, seems here to denote a chief. The women are more chaste than in the other isles of the Pacific. The houses are neat, some having carved door posts, and they rise in the form of a bee hive, warm but full of smoke. The dress is a slight wrapper ; and the hair which is frizzled, not woolly, is ornamented with a comb, while the beard is worn short. They subsist on roots and fish, the country being very barren and rocky. In New Caledonia Dr. Forster found large rocks of quartz, with layers of gold colored mica, blended with serpentine, hornblende, talc, and garnets. The bread fruit and cocoa nut are scarce ; but many new plants were observed.

Among the New Hebudes Captain Cook has given the most particular account of Mallicollo in the north, and Tanna in the south. Dr. Forster thought that the people of the former, who are ugly and diminutive, had a language different from any they met with in the voyage. In Tanna there is a remarkable volcano, with some hot springs. Here are found plantains, sugar canes, yams, and several kinds of fruit trees. The natives rather resemble those of New Holland than the Friendly Islanders, and are particularly dexterous in the use of the spear.

V. NEW ZEALAND.

THIS country was first discovered by Tasman in 1642, but he did not land. The natives however came on board, and some intercourse took place, during which seven of the Dutch, who had

* Des Brosses, i. 259.

† Peyrouse.

gone ashore unarmed, were cruelly slaughtered. The people were described to be of a color between brown and yellow, with long black hair resembling the Japanese.

Our great navigator Cook explored these regions in 1770, and discovered a strait which divides the country into two large islands. The southern was supposed to be called by the natives Tavia Poenamoo, and the northern Eaheianowmawe, names which equal the Russian in length, and which might well be contracted. The first is not less than 600 miles in length, by about 150 in medial breadth ; and the second is little inferior in size.

One of these islands appears to be far more fertile than the other ; but both enjoy a temperate climate, similar to that of France. The natives were again observed to be of a brown complexion, little deeper than the Spanish, and some are even fair. They equal the tallest Europeans in stature ; and their features are commonly regular and pleasing. It is singular to observe such a diversity between them and the natives of New Holland, when theory would expect to find them the same race of men. So far as present discoveries extend, the natives of New Holland and Papua seem to display an African origin ; while most of the other islands in the Pacific appear to have been peopled from Asia.

Manners and Customs.] The New Zealanders inter their dead ; they also believe that the third day after the interment the heart separates itself from the corpse, and is carried to the clouds by an attendant spirit.

Suicide is very common among the New Zealanders, and this they often commit by hanging themselves on the slightest occasions ; thus a woman who has been beaten by her husband will perhaps hang herself immediately.

They have no other division of time than the revolution of the moon, until the number amounts to one hundred, which they term " Ta-iee E-tow," that is one Etow, or hundred moons ; and it is thus they count their age, and calculate all other events.

Captain Cook's last voyage contains considerable information relative to the southern isle, from which a few brief hints may be added, as this region only yields to Papua in size and consequence. Storms were found to be not only frequent but violent, and often changed in their direction by the height of the mountains, which at these times are always loaded with vapours. The natives have no *morai*, or place of worship ; but the priests alone address the gods for prosperity.

The enormous lizards described by the natives are probably alligators. The bases of the mountains seem to be sand stone ; and the soil resembles yellow marl ; even the hills are covered with trees of the most lofty luxuriance, seeming to retain their foliage till expelled by the succeeding leaves in spring ; for in June, which corresponds to our December, the verdure was complete. The flax of New Zealand has excited particular attention, being of a beautiful silky appearance, and the plant remarkably tall. The culture has been attempted both in France and England without success ; perhaps from some remarkable difference in soil, or

the entire reversion of seasons. The birds seem to be often peculiar in species and color ; and it is not a little remarkable that, in this extensive land, no quadruped was observed, except a few rats, and a kind of fox dog, which is a domestic animal with the natives.

The general dress is an oblong garment made by knotting the silky flax ; and the ears are ornamented with bits of jad or bads, the face being often besmeared with a red paint, seemingly iron ochre mingled with grease. The habitations are far superior to those in New Holland ; and the boats are well built of planks, raised upon each other, and fastened with strong withes. Some are fifty feet long, and so broad as to be able to sail without an outrigger, but the smaller sort commonly have one, and they often fasten two together by rafters. The large canoes will carry thirty men or more ; and have often a head ingeniously carved. They bake their fish in a rude oven ; and the use of bread is supplied by a kind of fern, which yields a gelatinous substance like sago. They are ingenious mechanics with their rude tools, which are mostly of green jad. Their weapons are spears and javelins, with the pa-too, a kind of club or rude battle-axe ; and in combat they distort their features like demons. The yet warm bodies of their enemies are cut in pieces, broiled, and devoured with peculiar satisfaction.* The warlike actions of their ancestors are preserved in traditional songs, which are frequently sung, and accompanied with their rude flute.

Mount Edgecumbe is a prodigious high peak, on the W. side of the entrance of Cook's strait in New Zealand.

VI. VAN DIEMEN'S LAND.

THIS is the last great division yet discovered of the wide expanse of Australasia. The name was imposed by that eminent Dutch navigator Tasman, as already mentioned, in honor of the Dutch governor-general in the East Indies.† It has been recently discovered to be an island, in the form of an oblong square, about 160 miles in length by half that breadth, being divided from New Holland by a strait, or rather channel, more than thirty leagues wide, which in recent maps is called Bass's strait, and contains a chain of small islands running N. and S. During his last voyage, Captain Cook, in January 1777, visited Diemen's land for supplies of wood and water, and grass for the animals on board. They were met by some of the natives, who were entirely naked ; of a common stature, but rather slender, the skin being black, and the hair as woolly as that of any native of Guinea, but their lineaments were more pleasing than those of African negroes. The hair and

* Cook, ib. i. 162.

† There is another Van Diemen's Land, a northern cape of New Holland. Such duplicate names are injurious to the study of geography, and ought to be formally abrogated, if a Board of Nomenclature, so much wanted, were instituted. The southern Van Diemen's Land, on one of the isles of New Zealand, should be called Tasmania, in honor of the discoverer.

beards, and of some the faces, were smeared with red ointment. They seem to prefer birds to all other food. The land is chiefly of a good height, diversified with hills and valleys, and every where of a greenish hue, being well wooded and watered. The Fluted Cape appears to be composed of a very fine white sand-stone, which in many places bounds the shore, and the soil is either sandy, or consists of a yellowish mould, and in some places of a reddish clay. The forest trees seem to be all of one kind, growing quite straight to a great height, and may be well adapted for masts. The only quadrupeds discovered were opossums and kangooroos; and the birds cannot differ much from those of New Holland, to which there is as it were a passage by intermediate isles. The hovels resemble those of New Holland; but sometimes large trees are hollowed out by fire to the height of six or seven feet, so as to form a rude habitation.

Dusky Bay is a bay on the S. W. coast of New Zealand. It is between three and four miles broad at the entrance, and seems to be as deep as broad, affording a very good shelter for vessels. The land behind consists wholly of mountains, totally barren and rocky; but the land bordering on the sea coast is thickly covered with wood. Dusky bay abounds with fish; and there is also a great plenty of ducks. The most mischievous animals are the small black sand flies, which are very numerous. The inhabitants of this bay belong to the same race of people with those in the other parts of this country. They live a wandering life, and seem not to live in amity with one another.*



POLYNESIA.

THE boundaries of this extensive division of the globe have already been briefly mentioned in the introduction to the Asiatic Islands. A line passing due north, in the meridian of lon. 130 E. from Greenwich, will leave the Philippine Islands in the oriental archipelago, divided by a wide sea from the Pelew Isles, the most western group of Polynesia, though a few small detached isles appear to the S. W. About 20 N. lat. the line of demarkation bends N. E. so as to include the isle of *Todos los Santos*, and that called *Rica de Plata*, thence proceeding E. so as to include the Sandwich Islands, and pass S. about lon. 122 W. till it reach the southern lat. of 50, where it turns to the west, and joins the boundary of Australasia.

It is probable that future navigations may greatly improve and enlarge the geography of Polynesia, by the discovery of new groups, and the more accurate arrangement of those already known. At present the following appear to be the chief subdivisions :

* Hawksworth.

1. The Pelew Isles.
2. The Ladrones, a chain extending in a northerly direction, the small islands in the Pacific seeming to be mostly the summits of ranges or groups of mountains.
3. The Carolines, a long range from E. to W. so as perhaps, in strictness, to include the Pelews.
4. The Sandwich Isles.
5. The Marquesas.
6. The Society Isles, so named in honor of the Royal Society.
7. The Friendly Isles.

There are, besides, many isles scattered in different directions, which it would be difficult to connect with any group, and indeed none of them, yet discovered, appears to be of any consequence.

I. THE PELEW ISLES.

THIS group lying between lon. 130 and 136 E. and lat. 5 and 9 N. recently attracted considerable attention, from an ingenious and pleasing account of them, drawn up by Mr. Keate, from the papers of captain Wilson, who suffered shipwreck on these islands in 1783. The narrative is doubtless heightened by Mr. Keate's imagination, but the people appear to be a most gentle and amiable race, the gay and innocent children of nature. It is a peculiarity, in the oriental archipelago, that the small isles are the chief seats of comparative civilization, by the concentration of society. To this circumstance may be added, that in large islands the natives split into distinct tribes, generally hostile to each other, whence the pleasurable passions almost expire in the constant succession of fear and rage, while in the small islands, there being no room for secession, the society becomes as it were one family.

The Pelewans are a stout well made people, rather above the middle stature. Their complexions are of a far deeper color than what is understood by the copper hue, but not black, and their hair is long and flowing.* The men are entirely naked, while the women only wear two little aprons, or rather fringes, made of the husk of the cocoa nut. Both sexes are tattooed, and the teeth are dyed black. Polygamy is allowed, and the dead are interred. There seems no appearance of religion of any kind, though they have an idea that the soul survives the body. Mild, affable, and industrious, this little tribe, like the inhabitants of Otaheite, form an exception to the general rule of savage existence. The language is probably a dialect of the Malay, so widely diffused through these seas.

The government is in the hands of a king, under whom there are *rufaks*, or chiefs, who also constitute a kind of nobles. The property of all the land is supposed to be vested in the sovereign; while that of the people is only personal, as a canoe, weapons, or rude articles of furniture. Our domestic poultry are here wild in the woods, and were neglected by the natives, till taught by the English that they were proper for food. Their chief nourishment

* Keate, 318.

appears to be fish; but they make a kind of sweetmeat from the sugar-cane, which seems indigenous. The chief drink is the milk of the cocoa nut. They commonly rise at daylight, and immediately go to bathe in fresh water. Their houses are raised on large stones, about three feet from the ground, being constructed of planks and bamboos, and the fire-place in the middle, secured with hard rubbish. There are large mansions for public meetings. The best knives are of mother of pearl, others of a large muscle shell, or split bamboo. They make oval vessels of coarse earthen ware. In general their articles resemble those of Ota-heite, and other isles in the South Sea. The weapons are spears, darts, and slings: and the canoes are formed of the trunk of a tree, neatly ornamented.

These isles had scarcely been visited by any European till captain Wilson landed at Ooolong. They are in general of a moderate height, well covered with wood; and are circled on the west side by a reef of coral, from two to six leagues from the shore, and of great length. The ebony tree is found in the forests, and the bread fruit and cocoa tree seem to abound, with sugar-canapes and bamboos. No kind of grain was seen, nor any quadrupeds, except some rats in the woods, and three or four cats in the houses, probably drifted ashore from some wreck. Of birds, pigeons seem the most numerous: and the wild poultry have been already mentioned.

II. THE LADRONES.

THIS appellation implies the Isles of Robbers, and was given by that distinguished navigator Magalhaens, who first discovered these islands in 1521, the natives shewing great dispositions to pilfer, and much address in the execution of their designs.

According to the Jesuit Gobien, who has published a particular history of the Ladrones, or Marian Islands,* the inhabitants, till the arrival of the Spaniards, regarded themselves as the only men in the world. When they were visited by the Spaniards and Dutch, they inferred that these strangers were brethren, who had lost the primitive Guamee language. In color, speech, manners, and government, they considerably resemble the Tagals or people of the Philippines, before the Spanish conquest. These isles were then very populous, Guam, in 40 leagues of circuit, having 30,000 inhabitants.

In the reign of Philip IV. of Spain these isles were also called the Marians, in honor of his queen, Mary of Austria. The largest is that of Guam, but Tinian has attracted more attention, from the romantic description in Anson's voyage. There is no doubt that mariners who have been long at sea, and suffered many diseases and privations, will be infinitely delighted with any verdant land, and find beauties where none exist. Hence subsequent navigators

* Paris, 1700. 12mo.

have been greatly disappointed in Tinian. Anson found here abundance of wild cattle, of a white color, except the ears, which are generally black or brown. But they had probably been imported by the Spaniards, as a supply for the garrison at Guam. Here were also found oranges, limes, and cocoa nuts, with that celebrated and remarkable tree which bears the bread fruit.

The Ladrones are computed to be twelve or fourteen in number; but not above three or four are inhabited. Their vessels, called flying proas, have been esteemed singular specimens of naval architecture, and at a distant interval impressed Pigafetta and Anson with the ingenuity of the contrivance. The natural history of these islands is little known. It appears from the voyage of La Perouse that some of them are volcanic.

To the N. of the Ladrones are many small islands, extending to Todos Los Santos, lat. 30°, those farther to the N. belonging to Japan. This group may either be arranged among the Ladrones, or might perhaps admit of a distinct appellation.

The Golden and Silver Isles seem to be so styled from Japanese fables, and with a few other scattered isles on the N. of the Carolines, merit little attention. In these seas is the stupendous rock called Lot's Wife, rising in the form of a pyramid, and thus described by Mr. Meares in his voyage: "The latitude was 29° 50' N. the longitude 142° 23' E. of Greenwich. The waves broke against its rugged point, with a fury proportioned to the immense distance they had to roll before they were interrupted by it. It rose almost perpendicular to the height of near 350 feet. A small black rock appeared just above the water, at about 40 or 50 yards from the western edge. There was a cavern on its south-eastern side, into which the waters rolled with an awful and tremendous noise. In regarding this stupendous rock, which stood alone in an immense ocean, we could not but consider it as an object which had been able to resist one of those great convulsions of nature that change the very form of those parts of the globe which they are permitted to desolate."

Liquor is an island in the western ocean, so named by the companions of Beneyowski, who landed here in 1771, in a most perishing condition, without water or provisions. They found excellent water, fowls, fish and hogs; also cocoa, orange, and banana trees. It is a pleasant island. Beneyowski set up a cross here, with an inscription, lat. 34° 47' N.*

III. THE CAROLINES.

THIS is the largest group, or rather the most extensive range of islands in the Pacific ocean. This chain appears to have been first discovered by the Spaniards in 1686, and was named from the Spanish monarch Charles II. They are about thirty in number, and very populous, except three which were uninhabited. The natives resemble those of the Philippines, and chiefly live upon

* Beneyowski.

fish and cocoa nuts : and it is probable that their language only differs in a few shades. According to the letters of the Jesuits, each isle was subject to its chief, but all respected a monarch, who resided at Lamurec.

They believe in certain celestial spirits, and think they descend to bathe in a sacred lake in Fallalo, but there are neither temples nor idols, nor any appearance of worship. The dead are sometimes thrown into the sea, and at others interred, the grave being surrounded with a stone wall. It is said that those of Yap worship a kind of crocodile, and have their magicians. Polygamy is allowed, and the Tamul or chief of the large isle of Hogoleu had nine wives. Criminals are banished from one isle to another.*

They do not appear to have any instruments of music, but their dances are accompanied with songs. Their only weapons are lances, armed with bone. Even in this distant quarter of the globe negro slaves are not unknown : and in one or two of the islands the breed is said to be mingled, twenty-nine Spaniards having been left on one of these islands, who are supposed to have married and settled. The people of Ulea are reported to be more civilized than the rest, and appear much to resemble those of the Pelews.

The most considerable of the Carolines is Hogoleu, about 90 miles in length by 40 in breadth. Next is Yap, in the western extremity of this chain, but not above a third part of that size. The Caroline islands have been little visited by recent navigators ; but a few small groups have been discovered in their eastern extremities, which may properly be classed in the same range,

IV. THE SANDWICH ISLES.

THESE islands appear to have been first discovered by the great navigator Cook, and the island Owhyhee, the largest in the group, being about 280 miles in circumference, is unfortunately distinguished as the place where this able commander was slain by the natives in February 1779.

These islands were so named by Cook in gratitude to the earl of Sandwich, a minister who had warmly promoted his labors. The natives are rather of a darker complexion than those of Otaheite, but the features are pleasing ; and the death of Cook was not owing to ferocity, but a sudden impulse of undeserved resentment. The hair is sometimes long, sometimes curled, as among Europeans : but the nose is always spread at the point, perhaps owing to the mode of salutation, in which they press their noses together. Captain King represents them as a mild and affectionate people, free from the Otaheitan levity, and the proud gravity of those of the Friendly Isles. This ingenious people has even made some progress in agriculture and manufactures ; yet they still sacrifice human victims, but do not eat them like the people

* Des Brosses, ib. 486.

POLYNESIA.

of New Zealand; at least so far as information could be obtained. The beard is generally worn; and among the ornaments of both sexes is a kind of fan to drive away flies, made of the fibres of the cocoa nut, or of long feathers. Like the other nations of Polynesia, they tatoo their bodies; and among females even the tip of the tongue. The dress consists of a narrow piece of coarse cloth called the *maro*, prepared in the same manner as at Otaheite, which passes between the legs and is fastened round the loins. In battle the men throw a kind of mats over their shoulders, and this armor is neatly manufactured. On solemn occasions the chiefs wear dresses, artfully and beautifully formed of feathers. The women have only a slight wrapper, and the hair is cut short behind, but turned up from their forehead. The food consists chiefly of fish, to which are added yams, plantains, and sugar canes; while people of rank feast on the wild boar, and sometimes the flesh of dogs. The government is in a supreme chief called Erea Taboo, whose funeral is accompanied by the sacrifice of two or more servants. The inferior chiefs are styled Erees; and there is a second class of proprietors, and a third of laborers, all these ranks seeming to be hereditary. Though human sacrifices be here more frequent, the other rites appear to correspond with those of the Society Islands, which shall be described in the account of Otaheite.

Climate.] The climate appears to be more temperate than that of the West Indies; and in Owhyhee the mountains arrest the clouds, and produce rain inland, while there is sunshine on the shore. The winds seem generally easterly, and there is a regular land and sea breeze.

Zoology.] The quadrupeds, as usual in Polynesia, are few; only hogs, dogs, and rats, being discovered. The kinds of birds are not numerous, being, among others, large white pigeons, plovers, owls, and a kind of raven. These islands produce abundance of the bread fruit, and sugar canes of amazing size. Upon the whole this discovery was important; and Owhyhee is the largest island yet found in the wide extent of Polynesia.

V. THE MARQUÉSAS.

THESE islands were discovered by Mendana, who imposed the name in honor of Don Garcia de Mendoza, marquis of Caniente, viceroy of Peru, whence they are also sometimes styled the Isles of Mendoza. One of the best known to Europeans is the isle of Ohittahoo, to the S. of the larger Isle Ohevahoah.

In 1774 the Marquesas were visited by captain Cook, and in 1789 by the French circumnavigator Marchand. The best recent account of them is that given in the Missionary Voyage, captain Wilson having visited the Marquesas in 1797.

The natives are said to surpass all other nations in symmetry of shape, and regularity of features; and were it not for the practice of tatooing, which blackens the body by numerous punctures,

the complexion would be only tawny, while the hair is of many colors, but none red. Some of the women are nearly as fair as Europeans, and among them tatooing is not so universal.* A long narrow piece of cloth was wrapt round the waist, the ends being tucked up between the thighs, while a broad piece of their cloth was thrown over the shoulder, reaching half way down the leg.

The religious ceremonies resemble those of Otaheite ; and they have a Morai in each district, where the dead are buried under a pavement of large stones. Their deities are numerous, and the chiefs seem to have little power, custom alone being followed, instead of laws. Like most uncivilized nations, they have no regular meals, but eat five or six times a day, or oftener. The women seem more subjected to the men, than at Otaheite. The canoes are made of wood, and the bark of a soft tree, being commonly from sixteen to twenty feet in length, the prow carved in rude resemblance of a human face.

No quadrupeds were discovered except hogs, but there are tame poultry ; and the woods are filled with many beautiful birds. In one of these isles an English missionary was left, in the benevolent intention of discouraging mutual slaughter, and human sacrifices.

The largest isle of the Marquesas, Noabeva, is not above half the size of Otaheite : and in general the multitude of small islands in these seas presents a wonderful variety in the works of nature, the largest island yet discovered in Polynesia being Owhyhee, which is about 100 miles in length.

VI. THE SOCIETY ISLES.

THIS group has attracted more attention than any other in Polynesia, and our admiration of Otaheite has excited some degree of ridicule on the continent.

All the islands from longitude 160 west from Greenwich, to the eastern extremity of Polynesia, may be included under the general name of Society Islands, a range which will thus even exceed the Carolines in number, amounting to sixty or seventy. Of these, Otaheite is still by far the most considerable in size, being about 120 miles in circumference. It consists of two peninsulas, joined by a neck of land, about three miles in breadth, the smallest peninsula to the S. E. being about fifteen miles in length, by ten in breadth, while the large peninsula to the N. W. is almost circular, and about twenty-five miles in diameter : the whole length being thus about forty g. miles, or about forty-six British. From the map drawn by captain Cook, and republished with some improvements in the Missionary Voyage, this island appears to consist of two mountains, a larger and a smaller, joined by the narrow ridge above mentioned ; and the habitations are entirely confined to the level coasts. This circumstance seems universal in Poly-

* *Missionary Voyage*, London, 1799. 4to. p. 145.

nesia, as the natives crowd to the shores for fish, their chief aliment ; and it is probable that, the original colonies having settled on the coasts, indolence has prevented them from visiting the inland heights. Nor is it improbable that even in the large countries of Australasia a similar singularity may be observed, the scarcity of animal food probably compelling the natives chiefly to reside on the shores.

Near the central summit of the large mountain of Otaheite, which in circumference, though not in height, resembles Etna, there is a curious lake of some extent : but no river appears, there being only rivulets, which spring from the skirts, and pursue a brief course of two or three miles to the ocean.

Inhabitants.] The natural color of the inhabitants is olive, inclining to copper. Men exposed to the sun become very dark ; but the women are only a shade or two deeper than an European brunette. They have fine black eyes, with white even teeth, soft skin, and elegant limbs ; while their hair is of a jetty black, perfumed and ornamented with flowers.* But with all these advantages they yield infinitely in beauty to the women of the Marquesas, the face being widened from continual pressure from infancy, which by distending the mouth, and flattening the nose and forehead, gives a broad masculine appearance. Hence it is evident that the Grecian and academical forms, given by artists void of real taste or precision, to the people of the South Seas, in the prints that accompany the English and French voyages, are totally false and imaginary.

The chiefs are taller than the people, few being under six feet ; and as personal size and strength are the chief distinctions in early society, it is probable that their ancestors were selected for these advantages, which have been continued by superior food and ease. The dress of both sexes is nearly the same, except that the men wear the *maro*, a narrow piece of cloth wrapped round the waist, and passing between the thighs ; an oblong piece, cut in the middle to admit the head, hangs down before and behind ; and another piece is wrapped round the middle, and a square mantle is thrown over all. Both sexes wear garlands of flowers and feathers ; and the women use a kind of bonnet made of cocoa leaves. Parturition is easy ; and the infant can swim as soon as it can walk.

Their voice and speech are soft and harmonious ; and their dialect is the Italian of the Pacific ocean. Their rude manufactures are truly wonderful, and evince the greatest ingenuity. Their dwellings are about eighteen feet in length, with a few articles of furniture, such as trays, baskets, mats, and a large chest.

Religion.] Their deities are numerous ; each family having its Tee, or guardian spirit, whom they worship at the Morai ; but they have a great god, or gods of a superior order, styled Fwhanow Po, or the progeny of night. These benevolent people cannot conceive a future punishment ; and regard the idea alone as the utmost effort of human malignity. But they admit the immortality

* Miss. Voyage, 327.

of the soul, and degrees of future eminence and happiness, proportioned to its virtue and piety. The Tahouras, or priests, are numerous, and have great power; but all the chiefs officiate on certain occasions. The human victims are commonly criminals, and are killed during sleep; a curious instance of ferocious superstition, mingled with mildness of character.

Zoology.] The chief animals are hogs, as usual in all the isles of Polynesia, and they have also dogs and poultry. The bread fruit tree abounds; and large plantations are made of cocoa trees and plantains. The seas swarm with fish, and in catching them great ingenuity is displayed, the canoes having outriggers, or being doubled, by lashing two together.

Though the people of the Friendly Islands be superior in improvements and government; and the women of the Marquesas far superior in beauty; yet the people in Otaheite are so polite and affable, and their manners so engaging, that, joined with the romantic beauty of the country, the numerous streams, and the superabundance of spontaneous productions, this island is still preferred to all others in Polynesia.

It has already been mentioned that this island consists as it were of two mountains. These are encircled by a border of low land, from the beach to the rising of the hills, in some places near a mile in breadth, while in others the rocks impend over the sea. The soil of the low lands, and of the vales which intersect the ridge towards the ocean, is remarkably fertile, consisting of a rich blackish mould. When the trade wind gets far to the south it rains on that side of the island; but on the north the showers are less frequent and violent. In the latter the harvest of bread fruit begins about November, and continues till the end of January: while in the southern part it often begins in January and continues till November. On ascending the hills, the soil changes from a rich loam into veins of clay, or marl, of various colors. Beneath is a soft sand stone, of a brownish color; and basalt also abounds, of a fine grain, of which they used to make their tools. The black volcanic glass, called obsidian, is said to be found in the rivers, and also pumices, sure indications that a volcano once existed. The large fresh water lake above mentioned may perhaps have been its crater. This lake is said to be fathomless; but its shores are well peopled by an industrious race. The chief harbor of Otaheite appears to be Matavai, on the north side of the island; but there is another of similar note in the S. E. called Langaras.

The next island in regard to size is Uitea: and the others of this group, even taken in its utmost extent, are of far inferior dimensions to Otaheite, nor has any striking singularity yet been observed which might claim attention in a general description.

As an appendage to this article, some account may be added of Easter Island, a detached and remote region, which however, so far as the discoveries yet extend, seems rather to belong to Polynesia than to South America. This isle appears to have been first seen by Davis in 1686; and was afterwards visited by Cook and La Perouse. It is of a triangular form, the longest side being

about twenty-five miles in length, and at one extremity there appears to have been a volcano. The morais, or burial places, are of a remarkable structure ; being a kind of platform, in which are fixed shapeless and uncouth masses, rudely carved in imitation of busts, sometimes about fifteen feet in height. In these a red lava, very porous and light, is chiefly employed. There is scarcely a tall tree in Easter Isle, nor any brook, the water being retained in cavities made in the rocks ; but the natives are very industrious, and plant paper-mulberries, and bananas, with regular fields of potatoes and yams. They have the same language and features with the other natives of Polynesia.

VII. THE FRIENDLY ISLES.

THIS group extends chiefly from S. W. to N. E. including the Feejee Isles, those called the Isles of Navigators, and several detached isles in a more northerly position. The name was imposed by Captain Cook, in testimony of the disposition of the people ; but they had been discovered by Tasman in 1643, who called the chief isle, now styled by the native term Tongataboo, by the name of Amsterdam.* His account of the manners of the people corresponds with the more recent and precise information given by Captain Cook, and other late navigators. They are contrasted with those of Otaheite, as being of a more grave and regular behavior ; and the power of the chiefs is more despotic. A greater security of property has also superinduced more ingenuity and industry : but in general the manners and customs approach so nearly, that a farther account might appear repetition ; and the persons of the natives are likewise similar, though the chiefs seem inferior in stature.

In the Missionary Voyage, 1797, there is an interesting map of Tongataboo, which thence appears to be a plain country, in an universal and surprising state of cultivation, the whole island consisting of inclosures, with reed fences about six feet high, intersected with innumerable roads. The whole is such a picture of industry, as to form a reproach to nations who call themselves civilized. The length of Tongataboo is only about sixteen miles, by about eight at its greatest breadth. On the north side there is a lagoon, with several isles, constituting a tolerable harbor. The commodities are, as usual, hogs, bread fruit, cocoa nuts, and yams.

Though the people of the Friendly Isles be more free from wars than those of the group before described, yet Tongataboo is often stained with human victims ; nor do their ideas of property prevent their stealing from strangers. Some missionaries were here left, who imparted some useful arts to the natives, but the rats were very destructive to the European plants. These, with hogs, dogs, and guanos, constituted the only quadrupeds, till cats were left in the voyage of 1797. The morais seem to be here called

* See his description and prints in Dalrymple's Collection, vol. ii. p. 75.

flatookas ; and are constructed in the form of terraces with high steps, the material being coral stone.

To the N. W. are the Feejee isles, which the English missionaries discovered to be now subject to Tongataboo.

From the accounts of La Perouse it would appear that the isles discovered by Bougainville in 1768, and by him called the ISLANDS OF NAVIGATORS, are by far the most important in this large group. At Maouna, one of these islands, Captain De Langle, Lamanon the naturalist, and nine seamen were massacred by the inhabitants, the captain having unadvisedly given beads to a few of the chiefs, while he neglected the others. From the chart of La Perouse it appears that the largest of these islands, which he calls Pola, is about thirty-seven g. miles in length, by about half that breadth, being thus inferior to Otaheite, though far surpassing Tongataboo. Next in gradual diminution of size, and in position from W. to E., are Oyolava, Maouna, and Opoun. If the accounts of La Perouse be not greatly exaggerated, the Islands of Navigators constitute the most important group yet discovered in southern Polynesia, in regard to fertility and population. At Maouna the frigates were surrounded with two hundred canoes, full of different kinds of provision, fowls, hogs, pigeons, or fruit. The women were very pretty and licentious ; and the men of remarkable stature, strength, and ferocity : so that they despised the comparatively diminutive size of the French. The villages are delightfully situated in the midst of spontaneous orchards, and the huts neatly erected, with rude colonades, and covered with leaves of the cocoa palm. Hogs, dogs, and fowls abounded ; with the bread fruit tree, the cocoa nut, the banana, the guava, and the orange. Iron and cloth were despised, and beads alone acceptable.

According to La Perouse the island of Oyolava is at least equal to Otaheite, in beauty, extent, fertility, and population ; and he supposes that this isle, with the larger isle of Pola, and that of Maouna, contain 400,000 inhabitants.* Such is the abundance of provisions, that at Maouna 500 hogs, and an immense quantity of fruit were procured in 24 hours. The natives of Oyolava are also of great stature ; and here was observed the largest village in all Polynesia, smoking like a city, while the sea was covered with canoes. Though the people be remarkable for a ferocity of character, scarcely to be observed in any other part of Polynesia, they are still industrious and ingenious, polishing their wooden works very highly, with tools made of basalt. They have not only the bark cloth, but a kind composed of real thread, probably from flax, resembling that of New Zealand. Their speech was understood by a native of the Philippines, being derived from the Malay, a language diffused through all the scattered isles of Polynesia.

The Islands of Navigators are covered with fruit trees of vari-

* La Perouse, 414. So Cook over-rated the people of Otaheite, now ascertained to be only 16,050. Miss. Voy. Forster, Obs. 219, sagely argues that Otaheite contains at least 160,000. In like manner La Perouse's 400,000 may probably be 40,000. It is probable that there are not 300,000 souls in all Australasia and Polynesia.

ous descriptions, in which wood pigeons and turtle doves swarm; and to tame them is a favorite amusement of the natives.

OPARO ISLAND.

THIS island was discovered by Vancouver, December 1794, is in the Pacific ocean, lat 27° 36' S. lon. 144° E. and is 18 miles in circumference. The shores are smooth, covered with verdure to the water's edge. A range of high craggy mountains extends across this island, bearing the resemblance of vast fortifications, and at a distance exhibit a very romantic appearance. The number of inhabitants is about 1500; they are of middling stature, well made; their countenance is open and cheerful, and indicates a disposition given to hospitality. A fashion prevails among them of cutting their hair short. Their only clothing is a large green leaf of a plant, tied about the waist.*

Botany of the Asiatic Isles, of Australasia, and of Polynesia.

THE plants which have already been mentioned as characterizing the peninsula of Hindostan and India beyond the Ganges, form a very essential feature in the botany of those crowded groups that geographers have distinguished by the names of the Philippines, the Moluccas, and the isles of Sunda, and which, on this account, may be regarded as forming a large and important appendix to the Indian continent. Situated as they are directly under the equator, and extending to the distance of about 10 degrees north and south on each side of it, every thing that can be produced in vegetation by the combined influence of heat and moisture, is here exhibited in complete perfection. Being inhabited by a vigilant and warlike people, and unhealthy in the extreme to an European constitution, only a few commercial settlements have been established on the sea coasts, so that we remain almost entirely ignorant of their interior vegetable productions, many of which are probably peculiar to these countries.

All the East Indian palms, such as the cocoa nut, the areca, the sago, the palmetto, and the great fan-palm, abound in these islands, and furnish food and wine to the natives at the least possible expense of labor: nor are they destitute of any of those fruit-bearing trees that adorn and enrich the neighboring continent: the luscious mango, the scented eugenia, the fever-cooling tamarind, the pomegranate, and the orange, with all its kindred species and varieties, offer themselves on every side to the choice of the inhabitants. The plantain-tree, the ginger, the sugar-cane, the turmeric, the pine-apple, the yam, the sweet potatoe, rice, and an infinite variety of kidney beans, cucumbers, melons, and gourds, are found both cultivated and wild in inconceivable luxuriance; the larger grasses also, such as the bamboo, and the canna, which have been

† Vancouver.

already noticed as inhabitants of India, acquire a still more stately growth in the swamps of Java and Sumatra than on the banks of the Ganges. The sandal wood and the precious calambac or aloes wood, the canaria, from whose bark flows the gum elemi, the annotta, the cassia, and the ebony, together with many other valuable woods and gums, whose uses and even names are unknown to Europe, are produced in these islands in higher perfection than elsewhere.

The excessive heat and abundance of moisture that distinguish the Indian islands, constitute a climate peculiarly favorable for the growth of those plants whose active qualities and high aromatic flavor place them at the head of the vegetable world : this therefore is the native country of the most valued spices. Pepper, both the long and the round, is found wild, and is largely cultivated in all these islands : the *laurus cinnamomum*, the inner bark of which constitutes the pungently fragrant spice of the same name, is produced chiefly in Sumatra and the neighboring isles ; *caryophyllus aromaticus*, the receptacle of whose blossom is known in the European markets by the name of cloves, abounds for the most part in the Moluccas ; and the *myristica*, whose fruit is the nutmeg, and its inner covering the mace, by the mean jealousy of the Dutch East India Company has been almost entirely restricted to the little islands of Banda adjoining to Amboyna. But if this part of the globe be enriched by the most precious aromatics, it is also armed with the most active and deadly poisons : the same burning sun that exalts the former matures the latter. In the island of Celebez is produced the dreadful Macassar poison, a gum resin which exudes from the leaves and bark of a kind of *rhus* ; this species, together with the other poisonous trees of the same island, is called by the natives *ipo* or *upas*, a name now immortalized by the genius of Dr. Darwin. Such indeed is the deleterious activity of this tree that, when deprived of all poetic exaggeration, it still remains unrivalled in its powers of destruction : from the sober narrative of Rumphius we learn that no other vegetable can live within a nearer distance of it than a stone's throw ; that small birds accidentally alighting on its branches are immediately killed by the poisonous atmosphere which surrounds it ; and that in order to procure the juice with safety, it is necessary to cover the whole body with thick cotton cloth : if a person approaches it bare-headed, it causes the hair to fall off ; and a drop of the fresh juice applied on the broken skin, if it should fail to produce immediate death, will cause an ulcer very difficult to be healed.

All that we know of the indigenous vegetables of New Holland is confined to the immediate neighborhood of the British settlement at Port Jackson. The forests here are for the most part composed of lofty trees, with little or no interruption of underwood, so that they are readily penetrable in any direction, the principal shelter afforded to the few wild animals being in the long matted grass several feet in length, which overspreads the open country. In no discovered region has nature been less lavish of her vegetable treasures than in this part of the great southern

continent: the only fruit-bearing plant is a climbing shrub, the seeds of which are enveloped in a yellow cylindrical pulp tasting like a roasted apple. The loftiest of the trees, and which sometimes rises to the height of a hundred feet, is the eucalyptus robusta; it yields the brown gum, and its compact hard red wood has been imported into England by the name of New Holland mahogany. The red gum is procured from the ceratopetalum gum-miferum, almost the only one of the native woods that will float in water. A considerable proportion of the vegetables belong to the natural class of the papilionaceous, yet few even of these are referable to any of the old genera; two elegant species, the platylobium formosum and pultnæa stipularis, have been introduced into our hot-houses. The other indigenous plants are for the most part but little remarkable for their beauty or use, and the notice that they obtain in our gardens is chiefly owing to their being foreigners.

As we advance farther in the great Pacific Ocean towards America, and examine the botany of those numerous clusters of islands which extend in breadth from the Ladrones to Easter island, and in length from the Sandwich Islands under the northern tropic, to New Zealand, twenty degrees beyond the southern one, we shall find many features of general resemblance, modified however in such a manner as may naturally be expected by the different proportions which each receives of warmth and moisture, the two great supports of vegetation. The four following succulent plants are found either wild or cultivated in all the islands of this ocean that have yet been visited, namely, the sweet potatoe arranged in the Linnæan system as a species of convolvulus; the yam, whose tuberous root in the gardens of Otaheite sometimes attains the weight of thirty pounds; and two species of arum, which, by culture and roasting, become a mild farinaceous food. Of the plants peculiar to the tropical islands, the chief is the artocarpus, or bread fruit: this valuable tree rises to the height of more than forty feet, with a trunk about the thickness of a man's body; its fruit, which is nearly as large as a young child's head, being gathered while yet unripe, and roasted in the ashes, is a most wholesome nourishment, and in taste resembles new wheaten bread: for eight successive months every year does this tree continue to furnish fruit in such abundance, that three of them are amply sufficient for the support of one man; nor is this the whole of its value, the inner bark is manufactured into cloth, the wood is excellent for the construction of huts and canoes, the leaves serve instead of napkins, and of its milky glutinous juice a tenacious cement and birdlime is prepared. Of almost equal importance with the breadfruit, and even more generally diffused through the islands, are the plantain and cocoa nut trees. The sweet orange is found sparingly in the New Hebrides, and the fan palm is met with on the mountains of the Friendly Isles. The sugar-cane, the paper mulberry, and figs, are inhabitants of all the larger and rocky isles; and the piper methysticum, from which is prepared the intoxicating ava or kava, is unhappily but too frequent.

AFRICA.

AFRICA is, in size, the third of the four great quarters of the globe ; being less than America or Asia, and larger than Europe. It lies between lat. 37° 18' N. and 34° 50' S. ; and between lon. 17° 33' W. and 51° E. Its length, from cape *L'Aguillas*, its southern extremity, to cape *Serra*, its northern, is 4990 miles. Its greatest breadth from cape *Verd*, to cape *Guardafan*, is 4600. Its breadth, on the N. shore is 2300, from the head of the gulf of Guinea, to the coast of Adel 2800, from Angola to the coast of Zanguebar, 1950 ; and on the southern coast about 700.

On the N. lies the Mediterranean ; on the E. the isthmus of Suez, the Red Sea, and the Indian ocean ; on the S. the southern ocean, and the gulf of Guinea ; and on the W. and N. W. the Atlantic.

The religion of Mahomet is professed in the Barbary States, in Egypt, Sennaar, and the coast of Ajan. It is also the religion of the tribes of the desert ; and of all the Moors, and many of the negroes, of Soudan. Christianity, in a remarkably corrupted form, is established in Abyssinia ; and prevails extensively in Egypt. It was long since introduced by the Portuguese on the coasts of Congo and Zanguebar. Into the colony of the Cape, and in other parts of S. Africa it has lately been introduced by the venerable Vanderkemp, and other missionaries.

The native governments of this continent are throughout despotic and oppressive. All, however, appear to be independent. Egypt is little more than nominally dependent on Turkey. The Cape of Good Hope is the only considerable European colony.

We have heretofore stated the population at 50,000,000. It doubtless exceeds this number, though it may not amount to 98,945,000, which is Hassel's estimate.

The great natural features of Africa, the desert, the Nile, and the Niger, and the chains of *Jibbel Kumra*, and *Atlas*, have heretofore been illustrated.

Our description of the various divisions of Africa will commence with Morocco in the N. W. and proceed along the coasts of the Mediterranean, the Red sea, the Indian, Southern, and Atlantic oceans, and will conclude with some account of the states in the interior of Soudan, and some of the *oases* of the desert. The geography of the African islands will close our long and arduous undertaking.

KINGDOM OF MOROCCO.

INCLUDING SUSE AND TAFILELT.

CHAPTER I.

HISTORICAL GEOGRAPHY.

EXTENT, BOUNDARIES, DIVISIONS, NAMES, ORIGINAL POPULATION, HISTORY, RELIGION, GOVERNMENT, POPULATION, ARMY, NAVY, MANNERS AND CUSTOMS, LANGUAGES, CITIES, MANUFACTURES AND COMMERCE.

Extent.] THIS kingdom reaches from cape Spartel to cape Noon on the Atlantic coast, upwards of 630 miles, and on the Mediterranean, from cape Spartel to the mouth of the Muluwia, about 240. Its breadth near the middle and at the southern extremity is about 350.

Boundaries.] On the W. is the Atlantic ; on the N. the Mediterranean ; on the E. Algiers, the desert of Angad, and Bled-el-Jerede ; and on the S. Sahara, or the Great Desert.

Divisions.] The divisions of the emperor of Morocco comprise the former petty kingdoms of Fas, Morocco, Tarudant or Suse, and Tafilelt, together with the wandering tribes of Mount Atlas. They are now united under one government, and are divided as follows,

I. NORTHERN DIVISION, OR KINGDOM OF FAS.

Situation.	Towns.
Erreef, Mediterranean,	Gomera,
El Garb,	Tetuan,
Benihassan,	Rabat,
Temsena,	Dar el Beida,
Shawia,	
District of Fas,	Fas, Meqinez, Muley-Dris.
Tedla,	

II. CENTRAL DIVISION, OR KINGDOM OF MOROCCO.

Duquella,	Mazagan,
Abda,	Saffee,
Shedma,	Mogodor,
Haha,	Tidsi,
District of Morocco, Mediterranean,	Morocco.

III. SOUTHERN DIVISION, OR KINGDOM OF TERODANT.

Suse, Atlantic,	Terodant,
Lower Suse,	Akka,
Draha,	Draha,

IV. EASTERN DIVISION, OR KINGDOM OF TAFILELT.

Tafilelt,	Tafilelt.
-----------	-----------

Names.] The Romans called this country *Mauritania*, and *Maurusia*, or the country of the *Mauri*, or Moors ; and *Tingitania*, from its principal city, *Tingi*. The Arabs, or modern Moors, call it *Maroksh*, and the proper English name is Marocco, and not Morocco, as it is now written.

Original Population.] The Misraim, or first settlers of Egypt, are supposed to have been the earliest colonists of Mauritania ; for the authors of the Universal History remark, that the *Misraim* are called *Mauretani*, in the Jerusalem Targum, on Gen. x. Numerous colonies of Phœnicians also, were early planted here. Procopius mentions two pillars of white stone, as standing there in his time, with the following inscription in the Phœnician language and character : “ *We are the Canaanites, who fled from Joshua, the son of Nun, that notorious robber.* ” Augustus planted 9 Roman colonies here, and Claudius 3. The present Moors are principally Arabs.

History.] The chief events in the history of this country are, 1. Its situation when occupied by the *Mauri*, with whom the various nations, that commanded the navigation of the Mediterranean, carried on an extensive commerce. 2. Its subjugation by the Romans, under Julius Cæsar, B. C. 46. Augustus gave it to Juba, in lieu of his own kingdom of Numidia. The Romans kept the country upwards of 400 years, and were driven out by the Goths ; they, about A. D. 600, by the Vandals, they by the Greeks, and they by the Saracens, who have ever since possessed it.

Religion.] The religion is the Mahomedan, which was first planted here by Muley Dris Zerone. Great numbers of Jews are found in the country, but they are extremely oppressed.

Government.] The government is strictly despotic, the whole power over life, liberty, and property, being vested in the emperor. The only written laws are the Koran, and the comments on it. The laws are very severe. Murder, adultery, and theft, are punished with death, a death usually preceded by torture. The emperor and his bashaws are frequently the executioners.

Population.] The following is the account given by Jackson of the population of Morocco, taken from the Imperial Register. The sources of his information appear to warrant the belief, that it is as accurate a statement as can be obtained in such a country, where no census is ever taken. The estimate is given first of the larger towns, and secondly of the provinces, exclusive of those towns.

Province of Erreef, A*	200,000
El Garb, A	200,000
Beni Hassan, A	300,000
Temsena and Shawia, A	1,160,000
District of Fas, A	1,280,000
Large towns in this kingdom,	574,300
	3,714,300

* The provinces marked A, are peopled wholly, or chiefly, with Arabs ; those marked S, with Shelluhs.

KINGDOM OF MOROCCO.

Province of Duquella, A	966,000
Abda, A	500,000
Shedma, A	550,000
Haha, S	708,000
District of Morocco, A and S	1,250,000
Large towns in Morocco,	295,000
	— 4,269,000
Province of Draha, S	350,000
Suse, including Lower Suse, S	2,417,000
Large towns in Terodant, S	26,300
	— 2,793,300
Tafilelt, A	650,000
Tribes of Berebbers of North Atlas,	3,000,000
	—
	14,886,600

This population is divided by Jackson into four classes, Moors, Arabs, Berebbers, and Shullahs. The *Moors* are the descendants of those who were driven out of Spain. They inhabit the cities of Morocco, Fas, Mequinas, and all the coast towns in the northern and central divisions. The *Arabs* have their original stock in Sahara, whence they emigrate to the plains of Morocco, whenever the plague, famine, or any other calamity makes room for a new colony. The *Berebbers* inhabit the mountains of Atlas, north of the city of Morocco. They are probably descended from the ancient *Mauri*, with many Romans, Goths, and Vandals, intermixed. The *Shelluhs* inhabit the mountains of Atlas, south of Morocco, the provinces of Suse, and the greater part of Draha. Many families of the Shelluhs are said to be descended from the Portuguese, who possessed all the ports on the coast before the discovery of America. Other travellers mention a fifth class, namely Negroes. These were introduced in large colonies, from Guinea, by a late emperor Muley Ishmael, who built towns for them, assigned them lands, and gave them many privileges. By an intermixture with the other inhabitants, a numerous race of Mulattoes has started up in the kingdom.

Army.] The army amounts to 36,000 men. Of these, about 6000 constitute the emperor's body guard, 3500 are artillery, and the rest are light dragoons. The greater part of the troops are negroes and mulattoes. Their arms are a sabre, a long musket, a small red leather box in front for balls, and a powder-horn slung over their shoulders.

Navy.] The navy consists of 10 frigates, of from 16 to 30 guns, and 14 galliots, of from 2 to 10 guns, manned by 6000 sailors. These vessels are kept for piracy, and seldom unite in a fleet. An admiral, however, has the command of them.

Revenue.] The revenue amounts to somewhat more than a million of dollars, and the expenses to a little over 300,000 ; of which 180,000 are expended on the army and navy.

Manners and Customs.] The dress of the Moors consists of a red cap and turban, a (kunaja) shirt, which hangs outside of the

drawers, and reaches below the knee ; a (caftan) coat, which buttons close before from top to bottom, with large open sleeves ; and when they go out, a long shawl (hayk) of white cotton, silk, or wool, five or six yards long, and five feet wide, thrown carelessly round the shoulders. The dress of the women is similar. They wear also a profusion of ribbands, rings, necklaces, and bracelets. The Arabs dispense with the coat, and often with the shirt. The Berebbers wear drawers, and a cloak of dark blue cloth, with yellow sandals. The houses of the Moors have flat roofs, covered with terrace, a composition of lime and small stones. The Arabs live in tents. They are restless and turbulent, and their kabyles, or clans, are frequently at war with each other. The Berebbers also live in tents. They are a hardy, industrious race, and are occupied chiefly in husbandry, and the rearing of bees. The Shelluhs live in towns, are occupied in husbandry, live chiefly on barley, and are a small, meagre people. The natives generally are of a middling stature, with less nerve than Europeans. Deformed persons are rarely met with ; though the Moors, from their habit of sitting cross-legged, have clumsy legs and ankles. The blind are more numerous than in Europe ; but lame people are seldom seen. All shades of complexions are found here. Both sexes have very fine teeth. The Moors are scarcely darker than the Spaniards. The women of Fas are as fair as Europeans, and are generally of a pale complexion. The women of Mequinas are celebrated for their beauty. They have all dark hair, and black sparkling eyes, with a complexion of clear red and white admirably blended. All the women fade very early. The Moors are distinguished for their pride and arrogance. Their sensuality knows no bounds, and the worst crimes committed by man are common. Marriages take place very early on the part of the female, and though the law allows to each man four wives, yet few, except the most wealthy, indulge in this latitude. Many, however, marry four in succession, waiting till the bloom of the preceding one is passed, before a new one is taken. Many of them have concubines, and these are usually black women. The situation of the women is deplorable. The husband is safe in exercising any degree of cruelty on them from the extreme difficulty of detection. Both sexes are very cleanly in their persons. They wash before every meal, and eat with their fingers. In their houses they sit cross-legged, in the manner of tailors, on carpets and cushions, and at meals the bowl, or dish, stands upon the floor. The usual games are leap-frog, jumping, and foot-ball. Some of the well educated Moors are courteous and polite, and slow at taking offence, and where they repose confidence, affable and communicative. They all possess uncommon fortitude under misfortune.

Languages.] The language of the Moors is a corrupt Arabic, intermixed with Spanish. That of the Arabs is the language of the Koran, somewhat corrupted. That of the Berebbers is probably the language of the ancient Mauri, which was a kindred dialect to that of Numidia, and strongly resembled the Phœnician.

The language of the Shelluhs is different from all the others. All classes are extremely ignorant. Even the Moors, so distinguished for their literature in Spain, appear, immediately after their removal, to have renounced all their attention to learning and the sciences. The physicians of the country are mere empirics; their whole *materia medica* consisting, with hardly an exception, in herbs and vegetables.

Cities.] Morocco was built by Jusuf Teshfm, of the family of Luntuna, a tribe of Arabs inhabiting the plains E. of Atlas, about the middle of the 11th century, and stands in a fruitful plain, very nearly in the centre of the country. It is about 120 miles from the sea, and at a small distance from a spur of Mount Atlas. The environs are delightful, and richly cultivated. They abound with cornfields, with groves of palm, with the apricot, peach, pear, plum, pomegranate, and vine, and with numberless flowers, all growing spontaneously. The walls are very thick, and composed of lime and sandy earth, hardened in moulds. The houses are all behind high walls, of the rudest construction, and are not visible from the street. Some of them are built with elegance and taste. The palace is of hewn stone, ornamented with marble. The architecture of the principal gates is Gothic, embellished with various Arabesque ornaments. The walls of some of the rooms are of fillagree work, and others of glazed tiles, like the Chinese. To the palace are attached three gardens, containing the flowers and fruits of Barbary Timbuctoo and Soudan, and numerous pavilions, about 40 feet square, with pyramidal roofs. There are many private gardens also, similarly encircled and ornamented. The town has numerous mosques, sanctuaries, and temples. One of these, built by Muley el Monsore, is 7 stories high, in each of which are windows narrow without, but wide within. The body of it is supported by many pillars of marble, and the walls are 4 feet thick. The tower is square, and the ascent is by a gradually winding terrace. The population of the city is, according to Jackson, 270,000. About 2000 families of Jews reside in the eastern part of it. Great numbers of these people have emigrated to the neighboring mountains, to escape from oppression. The city is supplied with water from numerous springs and wells in the suburbs. The rich procure it from the Tensift, which flows a small distance to the north. There is also a subterraneous aqueduct of brick, 20 feet below the surface, which goes round the town, from which, at about every hundred yards, pipes of brick-work branch off, and convey the water to the different houses. The streets are far from being cleanly. Many of them are filled with heaps of dung and other filth, and with the ruins of decayed houses: for the town was some centuries ago several times more populous than it is at present. The air is generally calm. The days of summer are intensely hot; the nights are cool. In winter the cold is sensibly felt. The neighboring Atlas keeps off the *Shunre*, or hot wind, of the desert.

FAS, or FEZ, as it is commonly written, was founded about A.D. 786, by Idris a descendant of Mohammed, who had fled from Mc-

Mina to avoid the persecution of the Khalif Abdallah. The town is divided into Old and New. The centre of Old Fas is low, and in the winter dirty. The rest of the town is built on gentle acclivities. The houses are lofty and spacious. They all have flat roofs, on which carpets are spread in the summer evenings. A small turret is erected on each roof for the use of the females. In the centre of each house is an open quadrangle, surrounded by a gallery, which communicates with the staircase, and with the doors of the different apartments. The portals of the houses are supported with pillars of brick, plastered over. The best houses have cisterns for the baths. Every house also is supplied with water by a branch of the Seboo, from Mount Atlas, which enters the town in two places by covered channels. The number of mosques is very great, and about 50 of them are very sumptuous edifices, ornamented with a most beautiful kind of marble, unknown in Europe, and procured from Mount Atlas. A public bath is attached to each mosque for religious ablutions. There are also other public baths, in various parts of the town. The hospitals are few, and in a wretched condition. There are about 200 caravanseras, each 3 stories high, and containing from 50 to 100 apartments. The lodger provides his own bedding and food. Each trade has a separate part of the town allotted to it. New Fas is contiguous to the old town, is well built, and contains the machinery for the different trades. The population of both parts of the town is stated by Jackson at 380,000.

MEQUINAS stands near the river Seboo, and at a small distance from Fas, in the midst of a beautiful valley, surrounded by gentle eminences. These are ornamented by groves of the richest fruit-trees. In the plain, on the east of the city, is a wall of circumvallation, 6 feet in height, built as a defence against the Berebbers. At the south end is the palace, a very large square edifice, built wholly on the ground floor. The rooms are all 25 feet long, 12 wide, and 18 high. To this are annexed several beautiful gardens. The Millah, or that part of the city occupied by the Jews, is walled round, extensive, and in good repair. Contiguous to this is the Negroes' quarter. The streets are not paved, and in winter are almost impassable. The population is 110,000. The inhabitants are generally hospitable. Their manners are more mild than in any other part of the empire.

TERODANT, formerly the capital of the kingdom of Suse, or Tero-dant, is now the metropolis of the south. It is extensive and ancient. There is a noble palace here, adorned with gardens, containing the most delicious fruits. The population is 25,000, and was formerly far greater. The town is now famous for salt-petre of a superior quality, for the manufacture of leather and saddles, and for dyeing. The river Suse passes through, and the inhabitants show massive iron rings in the castle walls, to prove that it was once navigable for ships to the town.

RABAT is a seaport, at the mouth of the Bu-Regreg, on its south bank. The environs abound with excellent fruits. The walls are about 2 miles in circuit, and are strengthened by square towers,

ers. The houses are poorly built. The population is 25,000. There is here a manufactory of cotton cloth, and docks for ship-building. Here are the ruins of a spacious mosque, built by Sultan el Mansor, the roof of which was supported by 360 marble pillars. Near it are the ruins of a large subterranean cistern attached to the mosque, the tower over which is built of hewn stone, and 180 feet high. The view from it is pleasing and extensive. On the E. side of Rabat is a walled town, called Shella. This is sacred ground, and contains many Moorish tombs. Various Roman and African coins have been dug up here.

SALEE is a walled town at the mouth of the same river, on the opposite side from Rabat. It was formerly a nursery of pirates, and the Salee rovers were the common terror of all ships sailing near the coast. The population is 18,000. The road of Salee is dangerous for shipping, and the sand bank at the mouth of the river will scarcely permit vessels of 100 tons to enter. The road of Rabat, without the river, is safe from April to September inclusive. Violent winds from the S. render it unsafe the rest of the year. A battery in Salee, of 24 cannon, commands the entrance of the river.

TETUAN stands 4 miles from the Mediterranean, a little S. E. of the straits. The environs abound with the most delicious fruits. Its oranges are celebrated. Its population is 16,000. It was much greater when the Moors were driven from Spain. The inhabitants are Moors and Jews, who both speak a corrupt Spanish. From the raisins and figs of the neighboring gardens, the Jews distil an argent spirit, called *mahaya*, much like the Irish esquebaugh.

SAFFEE, or ASFEE, is S. of Cape Cantin. It lies between two hills, which render the town intolerably hot in summer, and in winter very disagreeable, as the rains run from the hills into the town, and discharge themselves through the main street into the ocean, deluging the lower apartments of the houses, and sometimes so suddenly, that there is no time to remove the property from the stores. The walls of the town are thick and high, and were probably built before the Roman invasion. Population 12,000.

MULEY DRIS ZERONE is an inland town, east of Mequinas, among the mountains, and contains 12,000 inhabitants.

MOGORODOR, or SUERAH, is built about 70 miles S. W. of Saffee, on a low flat desert of accumulating sand, which separates it from the cultivated country, and is defended from the encroachment of the sea by rocks, which extend from the northern to the southern gate; though at spring tides it is almost surrounded. Within the harbor at the landing place, are two long batteries mounted with handsome brass eighteen pounders. On the land side also is a battery of considerable force. The harbor is formed by a little island 2 miles in circumference lying S. of the town. Between this and the main land ships anchor, but there is only 12 feet water at low tide. The houses are all of stone and white, and look beautifully from the sea. The streets cross each other at right angles and are narrow. The houses have few windows towards the street. Those of the foreign merchants are the most spacious and elegant. Population 10,000.

TANGIER, the ancient *Tingis*, is situated near the west mouth of the straits, a few miles from Cape Spartel. The Goths took this town from the Romans, then the Arabs obtained it, and next the Portuguese in the 15th century, who, in 1662, gave it to the English. They, in 1684, destroyed the fortifications, and abandoned it. It still has some good batteries. The inhabitants are 6,000 in number. They supply Gibraltar with provisions.

CEUTA, or CIBTA, stands close by Mount Abyla, or Apes mountain, as the Moors call it. The town belongs to the Spaniards. The emperor twice attempted to take it, about the close of the last century, without success.

MELILLA is in the northeastern part of the country, beyond the cape of the Three Forks. The country around is pleasant, and abounds with wax and honey. This also belongs to the Spaniards. These towns are called by them the African presidencies, and contain together about 15,800 inhabitants. Garrisons are kept in both.

Manufactures and Commerce.] Few manufactures are attempted in this country, and most of those which exist are inferior to European. Shawls, and sashes of silk and gold, hawks of cotton, of silk, of cotton and silk mixed, and of wool, are made of a superior quality at Fas and at Tafileit. Morocco leather, both of goat and calf skins, is made extensively, also tallow candles in small quantities. The gun powder made by the Arabs of Wooled-Abussebah, south of the river Suse, is of a quality far superior to that of Europe. Carpets are made in the province of Tedla.

The commerce of Morocco is with foreign nations, and with the interior of Africa. That by sea is entirely passive. The exports are sweet and bitter almonds, gums, Barbary, Senegal, and Sandrac, bees-wax, goat, cow, and calf-skins, oil of olives, wool, ostrich feathers, ivory, pomegranate peals, dates, raisins, wormseed, rose-leaves, wild thyme, glue, anniseed, fennel, gingelin seed, walnuts, straw, tallow, tallow-candles, and string: the imports are woollens, linens, silks, nankeens, cottons, cotton, gum-benzoin, musk, slick-lack, capilaise, gin, sugar, teas, cloves, potatoes, sal ammoniac, tin, iron, steel, copperas, alum, silk handkerchiefs, raw silk, looking glasses, hardware, red and white lead, arsenic, lavender, amber beads, china and earthen ware, dollars, Hebrew Bibles, drugs, and confectionary. Mogodor is the principal port. The exports from that town in 1804, amounted to £127,679 sterling, and the imports to £151,450 sterling.

The inland trade is chiefly with Timbuctoo, across the desert. The articles are carried on camels, accompanied by the Arabs, who let them at a low rate to the merchants. This tedious and perilous journey is usually made between September and April inclusive. Several hundred camels usually go together. A guard of soldiers accompanies the caravan to protect them from the wild Arabs of the desert. The course of the caravan is not in a direct line; but is determined by the *oases* or fertile spots, interspersed like islands, in this ocean of sand. At each of these it usually halts about a week. In the intermediate journeys the *shume* is often so violent as to exhale the water, carried in skins by the

camels. The guides of the caravan steer by the stars in the night, which is far the pleasantest time for marching. The journey from Fas to Akka, the place of rendezvous on this side of the desert takes up 18 days. Here they halt a month; and then in 16 days reach Tagassa, where they remain 15. In 7 more they reach Arawan, where they make a similar stop, and in 6 days reach Timbuctoo, making a journey of 54 days actual travelling, and 75 of repose. The articles carried to Timbuctoo are linens, cottons, muslins, fine cloths, coral and amber beads, pearls, raw silk, brass nails, coffee, tea, refined sugar, Italian silks, red woollen caps, turbans, nutmegs, cloves, ginger, pepper, tobacco and salt, and the various manufactures of Morocco. The articles brought back are gold dust, twisted gold rings of Wangara, gold rings of Jinnie, bars of gold, elephants' teeth, gum of Soudan, grains of Sahara, odoriferous gums, and slaves. Ostrich feathers and ambergris are also collected on the confines of the desert.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, CAPES, MOUNTAINS, FORESTS, ZOOLOGY, BOTANY, MINERALOGY.

Climate.] FROM March to September the atmosphere is hardly ever charged with clouds, and in the rainy season the sun is rarely hid a whole day at once. The summer days are excessively hot, and in the south the inhabitants are often visited by the *shume*, or parching wind, from the desert. Many loathsome and distressing diseases prevail in Morocco. Children are often afflicted with baldness and epilepsy. The women are very subject to the latter. Pains in the head, stomach, bowels, and bones are very common. Schirrous ulcers, and other eruptions, frequently break out on the bodies and limbs of the inhabitants. The leprosy is very common, especially in Haha. There they are seen in parties of 10 and 20 begging charity. In the city of Morocco there is a separate quarter for them, outside of the walls. Whenever they leave home, as the disorder is thought contagious, they are obliged to wear a straw hat, with a very broad brim, tied on in a particular manner, as a badge of their disease. They intermarry only with one another. The want of eye-brows is the only external mark of disease. In damp weather they may be seen in clusters sitting round a fire, warming their bones, for they ache all over, till the weather resumes its wonted dryness. The *elephantiasis*, and *hydrocele*, are frequently met with. *Dropsy* and *hernia* are more rare than in Europe. Ophthalmia is very common. The plague also occasionally visits Morocco, and is awfully destructive in its ravages. That of 1799 carried off about 50,000 of the inhabitants of Morocco, and about 65,000 of those of Fas.

But the most prevailing disease, is that which has so long proved the scourge of voluptuousness, and which is one of the few direct punishments, which, on this side of the grave, are seen to be inflicted by God on transgression. It is said to have been introduced into Morocco by the Jews, on their expulsion from Spain; and now there is scarcely a Moor in the Barbary States, who has not the virus in his veins.

Face of the Country.] The kingdoms of Morocco and Fas, W. of Mount Atlas, except the province of Haha, are a pleasant champaign country, every where covered with vegetation, and generally cultivated. Except in the towns on the coast, and in the four inland cities of Mequinas, Fas, Muley Dris Zerone, and Morocco, the only dwellings are tents inhabited by Arabs. The provinces of Haha and Suse are interspersed with mountains and valleys, hills and dales. Here villages and walled habitations are scattered over the country. The houses in Haha are built of stone, each having a tower; and stand on elevated situations, forming a pleasing view to the traveller. Draha and Tafilelt are chiefly plain countries, and are very scantily supplied with water. Between Tafilelt and Atlas lies a plain, five days journey in width; nearly destitute of vegetation, on which rain never falls. The soil is a whitish clay, which, when moistened, resembles soap. The dwellings in these provinces are walled houses; and are chiefly placed near the two principal rivers, which pass through them, Draha and Fillely.

Soil and Agriculture.] The soil of all the provinces west of the mountains is very fertile. That of the kingdom of Fas is generally black, but sometimes red, without stones or clay, generally without trees, but incalculably productive. Suse is the richest province of the empire. The soil of Draha and Tafilelt is of a saline nature, communicating a strong briny taste to the rivers. It is not generally productive, except on their banks. All the provinces north of Haha are extremely productive of wheat and barley, and with superior cultivation might export immense quantities. As a specimen of their agriculture the inhabitants reap the grain high from the ground and burn the stubble for manure. They also throw the grain on the ground, and afterwards plow it. Beans, peas, caravances, and Indian corn, are cultivated here occasionally. The fragrant tobacco, called *Mequinasi* grows in Benchassan and near Mequinas. Cotton, of a superior quality, and hemp are grown near Salee and Rabat. The fruits cultivated in this part of the country are figs, grapes, most delicious oranges, pomegranates, citrons, lemons, limes, the *opuntia*, or prickly pear, a native of the Canary Isles, apricots, peaches, plums, apples, pears, melons, and strawberries. These also grow wild, and many of the fruit trees form extensive groves and forests. The productions of Haha are wax, gum sandrac, and arabic, olives, almonds bitter and sweet, oil of olives and of argan, besides all the fruits of the north. Barley is here more abundant than wheat. Grain is not generally cultivated in Suse, only enough for their own consumption; but all the fruits, which have been mentioned,

together with the date, are abundant. The grapes of Edautenan are exquisite. The sugar cane grows spontaneously about Terodant. Near Terodant and Ras-el-Wed, are forests of olives of two days' journey in breadth. Those of almonds also are very numerous and extensive. The Jews in this province manufacture wine and brandy. Cotton, indigo, and stick-liquorice, gums, amarad, arabic, soudan, eupharbium, and sandrac, wax, wild thyme, or-chilla weed, orriss-root and coloquintid, are also among the productions of this province. Indian corn, rice, and indigo are raised near the rivers of Draha and Tafilelt, and a little wheat and barley in the latter. The dates of both are astonishingly abundant and of an excellent quality. They constitute the chief food of the inhabitants. In Tafilelt alone there are upwards of thirty varieties of this fruit. The produce of a single plantation near the imperial palace, on the river Fillelly, was 7500 camel-loads, or quintals, which sold for 5000 dollars.

Rivers.] The Muluwia separates Morocco from Tlemsen, or West Algiers, and empties into the Mediterranean in lon. 1° 30' W. from Greenwich. It is a deep and impetuous stream, and impassable in *Liali*, or the 40 shortest days. In summer it is always fordable, and often dry. El Kose, or Luccos, runs westward, and empties at El Araiche. It is extremely crooked, and abounds in the fish called shebbel. Ships of 150 tons may enter it at high water.

The Baht rises in Atlas, and loses itself in the swamps and lakes of El Garb.

The Seboo rises from a lake in a forest, near the foot of Atlas, and winding through the plains, passes within 6 miles of Fas, below which it receives the branch which flows through that city. This river is impassable, except in boats, or on rafts. At Mamora, a village of 300 inhabitants, where it enters the sea, it is large, deep, and navigable.

The Bu Regreg, also rises in Atlas, and winds through the valleys of Fas, and the plains of Benihassan, to the sea, between Sallee and Rabat. Here some of the emperor's frigates are wintered.

The Morbeya issues from the same range, and dividing the provinces of Fas and Tedla, passes through those of Morocco and Shawia, and separates Temseña from Duquelle. At Bulawan, on the confines of Duquelle, the river is passed on a raft of rushes, reeds, and goat-skins. There was formerly a bridge. Azamor, a town of 1000 inhabitants, lies at its mouth. Its waters abound in the shebbel fish.

The Tensift rises in the Atlas, east of Morocco, and passing 5 miles N. of that city, winds through the province, and nearly dividing Abda and Shedma, falls into the ocean, 16 miles below Safi. Its chief tributary is the Nissis. The Tensift is a torrent during the *Liali*, or 40 shortest days, but in summer is fordable, though not safely, without a guide. At the ferry, near the mouth, at low tide, the water in summer reaches only to the stirrups. About 6 miles from Morocco is a bridge, built by Muley El Mansor. It is very strong, but flat, with many arches, and the cement so hard that the stones can scarcely be separated.

The Tidi rises in a spur of Atlas, and is a short and small river, emptying a little below the town of Tidi.

The Suse issues from the main range of Atlas, 30 miles above Terodant, and after a winding course, falls into the sea, 6 miles S. of Santa Cruz, a village of 300 inhabitants. At its mouth is a bar of sand, which, at low water, almost separates it from the ocean. The Messa, a small stream, flows from Atlas, and falls into the ocean at Messa, a town of 1000 inhabitants. The Akassa, near the southern boundary, is navigable to Noon, and empties at Cape Noon.

The Draha is a river which flows from the east side of Atlas to the south, and passing through the province of Draha, is lost in the sands of the desert. Its waters are brackish.

The Fillely rises on the east side of Atlas, and runs N. E. to Tafilelt, where it is as large as the Thames at Putney. Thence it runs towards the Mediterranean, and is finally lost in the Desert of Angad. It is the largest river of Morocco, and its whole course is 450 miles. Its waters also are brackish. It has several castles of terrace wall on its banks, inhabited by the princes of the reigning family of Morocco.

Capes.] The Cape of the Three Forks, is a little N. W. of Melilla. Abyla is a noble promontory, opposite Gibraltar. Cape Spartel is a fine headland, and the N. W. point of Africa. Cape Cantin is a height visible from the tower of Morocco. Cape de Geer is a noble bluff, and the termination of a branch of Atlas. Cape Noon is the southwestern limit of the country. The coast on the Straits is every where rugged, and interspersed with projecting cliffs. The western coast is defended by numerous rocks, level with the surface of the water, and occasionally an intermediate beach between them, where the water is shallow, and the surf runs high. South of Santa Cruz, even to Cape Bojador, the coast is every where deceitful and dangerous. The waves break violently over the rocks, and the rapid current, which invariably sets in towards the land, frequently drives vessels ashore.

Mountains.] The mountains of Atlas have already been mentioned. Only that part of the range, called West Atlas, which runs from S. W. to N. E. is in Morocco. The names North and South Atlas, are also applied to the different parts of it. The western border of the range passes about 30 miles east of the city of Morocco, where they are immensely high, and covered with eternal snows. A lofty eminence here assumes the form of a saddle, and is visible at Mogodor in a clear day, and indeed several leagues out at sea. These mountains are very fertile, and produce excellent fruits, having at different heights the advantage of various climates. The inhabitants of the upper regions of Atlas live four months of the year in excavations of the mountains.

Forests.] At El Araiche commences a forest, consisting chiefly of oak, with a few cask and other trees intermixed, which reaches a great distance eastward. A little S. E. there is another, consisting wholly of cork trees. In Haha are extensive forests of the Argan, and in Suse of the palm and the olive.

Zoology.] The horses of West Barbary are renowned for fleetness and activity. The breed, however, has been much neglected, except in Abda and the province of Morocco. These horses have stronger sinews than those of Europe, and, after a little management, are extremely tractable. The stallions only are rode ; the mares are kept for breeding ; geldings are unknown in Mahometan countries. Mules and asses abound every where, also camels and horned cattle. Lions are very common in the forests, and often infest the roads, so as to render them impassable. The hyena (*dubbah*) is found in all the rocks and caverns of the mountains, where he is far less ferocious than when confined. The *deeb* resembles the hyena in his propensity to devour dead bodies, but is only half of his size, and is far more fierce in his disposition. The leopard (*nimmer*) is spotted, and has the size of the royal tiger of Asia. His strength and agility are wonderful. The wild boar is the favorite game of the Morocco hunters, and abounds in the southern provinces. The rhinoceros (*reem*) is highly valued for his horn. The wild cat is very fierce, and sometimes hardy enough to attack a man. The *sibsib* is an intermediate genus, between the rat and the squirrel, and in its form resembles the ichneumon. It is very active, and lives in holes in the rocks. The antelope (*gazel*) is the favorite of the Arabian poets. It has straight dark horns, with a beautiful and prominent black eye, and moves swift as the wind. The *harreh* is, among the Arabs, the emblem of purity. The head and back are of a light red, the belly of a beautiful white. It is not found north of the river Suse. The bizoar stone is produced by the harreh. The *aoudad*, in size and color, resembles a calf, and is the wildest animal of the African woods. The red fox (*thaleb*) is like that of Europe in its scent and disposition. The ape is of a very large size in North Atlas. The *jumar* is the offspring of the bull and the ass. It is very uncommon. The *heirie*, or camel of the desert, is more elegantly formed than the camel of burden. They will generally go 7 day's journey in one, and continue 3 days without eating. They go from Timbuctoo to Tafilelt in 7 days. The *sh'rubah er'reeh*, a horse of the desert, travels also with astonishing swiftness, but requires to be fed once a day on camels' milk. The sheep of Suse feed only on the wild aromatic herbs, and are wholly singular in the fineness of their flavor. The wool of some of them is also extremely fine. The wool of the sheep of Tedla has the softness of silk. The goat is very common, but peculiarly so in Tafilelt, where the finest morocco leather is manufactured.

The camelion, Sahara lizard, locust, scorpion, musquitos, gnat, and cricket are among the insects of Morocco. The *buska* is a black venomous serpent, 7 or 8 feet long. When attacking travellers it coils itself up and then darts to a very great distance. The wound inflicted is small, but the sufferer in a few minutes turns black and expires. The *haffah* is 2 feet long, as thick as a man's arm, and beautifully spotted with yellow and brown. Its poison is almost instantaneous in its operation. The *aisawie*, or charmers of serpents, carry these animals about for a show. The

boa, or serpent of the desert, is often 80 feet long, as thick as a man's body, and of a dingy color, but not venomous. It moves with such swiftness, that it is impossible to escape from it. It will twist itself round an ox, and after crushing its bones will swallow it gradually, after which it lies supinely on the ground for two or three days unable to proceed, till the animal is digested. Domestic serpents are found in almost every house, and are treated as members of the family. The tortoise is very large and common; those of the desert weigh from 400 to 600 weight. The ostrich, eagle, vulture, bustard, white heron, wild goose, ox-keeper, pelican, stork, flamingo, partridge, pigeon, wood pigeon, cream-colored dove, turtle-dove, ring-dove, curlew, plover, lark, crested-lark, black-bird, starling, cuckoo, nightingale, and owl, are among the birds of this country, as well as the *rogr*, a dark kind of partridge, the *tibib*, a species of sparrow, and the *huge*, a little ash-colored bird that feeds on beetles.

The *shebbel*, a fine species of salmon, is taken in all the rivers. The fish on both coasts are the mullet, red and gray, brim, anchovy, sardine, herring, mackerel, rock cod, skate, sole, plaice, turbot, and turtle. The *azalimgi*, *tasargalt*, and *irgal* are peculiar to the western coast of Morocco. They are taken in the bay of Agadeer, or Santa Cruz, and prepared in the ovens of Aguram, whence they are transported, in immense quantities, to Bled-el-Jerede. Whales are frequently cast on the shore.

Botany.] The fruits, and medicinal herbs, have already been mentioned. The gum-sarbac tree looks like the juniper. Its wood has a fine fragrance, and is impenetrable to the worm. The *tizra*, a plant 3 feet high, the *snobar* and the *rassul*, are used by tanners. The *hashisha*, or African hemp, is reared for the manufacture of ropes. When smoked instead of tobacco, it produces an agreeable intoxication. A decoction of the *surnag* is a powerful, but dangerous stimulant. The lotus, or water lily, grows in the rivers. Mallows are every where cultivated. Truffles are roots which grow in sandy places. They are highly stimulating and very palatable. The gum euphorbiem is procured from a curious succulent plant, resembling the wild thistle; gum ammoniac from one which is like the European fennel; and gum arabic, from the *attaleh*, a high thorny tree with leaves like those of the juniper. Pitch is made in great quantities from the wild juniper.

Mineralogy.] Gold and silver mines are found in various parts of Morocco, but more particularly near Messa in Suse, on the south bank of the river. The Portuguese formerly worked them. About Shtuka and Elala, in the same province, are very rich mines of silver. There is another in the plains of Msegina, near Santa Cruz. Gold is also found in many places on the mountains. In Suse, near Idaultil, there is iron, which the people manufacture into gun-barrels and other articles. At Teselagt, a little N. E. the copper mines are very abundant. They work them only as they want the ore. In the neighborhood there are lead mines. In Tafilelt are mines of antimony, of a peculiarly fine quality, and

abundance of lead ore. Morocco, *Bled-el-Jerrede*, and parts of Sahara abound in mineral salt, which is dug from quarries and mines. In Abda is a large salt lake, which furnishes great quantities of salt of a remarkably pure quality. Vast quantities of salt are conveyed by the caravans to Timbuctoo, where they have none. Salt-petre is made abundantly at Fas, Morocco, and Terodant. This last is distinguished for its strength and purity.

ALGIERS.

CHAPTER I.

HISTORICAL GEOGRAPHY.

EXTENT AND BOUNDARIES, DIVISIONS, NAMES, HISTORY, RELIGION, GOVERNMENT, POPULATION, ARMY, NAVY, REVENUE, MANNERS AND CUSTOMS, CITIES, MANUFACTURES.

Extent and Boundaries.] THE length of this territory, on the Mediterranean, from the mouth of the Muluwia, in lon. 1° 30' W. to the mouth of the Zane, in lon. 9° 16' E. is 610 miles. Its breadth in the W. is not more than 60 miles ; but E. of Algiers it exceeds 100. It has Morocco W. the Mediterranean N. Tunis E. and the desert of Angad S.

Divisions.] It is divided into three provinces : Tlemsen, sometimes called Tremecen, and sometimes Mascara, in the W. ; Ti-teri in the S. and Constantina in the E. This last is much the largest and richest.

Names.] This country was the ancient *Numidia* ; and, after the reduction of Africa by the Romans, was called *Mauritania Cæsariensis* ; while Morocco was then called *Mauritania Tingitana*.

History.] The Numidians had the same origin with the *Mauri* ; but we know very little of their early history. In the time of the first Punic war it contained two kingdoms ; that of the *Massyles* in the E. extending about 130 miles on the coast, and that of *Massaesyli* in the W. occupying the rest of the country. Massinissa, king of the former, a very brave, able and honorable prince, united them both under his dominion about 190 years B. C. Cæsar reduced the country to a Roman province B. C. 46. The Vandals drove out the Romans ; Belisarius expelled them for the Greek emperor ; and the Saracens terminated the Greek domination about A. D. 650. Till 1051 this country was divided up into a great number of petty states, when Abubeker, an Arab of the Zinhagian tribe, drove out the Sheiks, or petty chieftains, and possessed himself of Morocco and Algiers. In the 12th century his

descendant Braham Ali was expelled by the Marabouts, or priests, with Mohavedin at their head ; they, by the governor of Fas ; and he, in the 13th, by the Sheriffs of Hascen, the descendants of the Sheiks ; who divided the country into four kingdoms, Tlemsen, Tenez, Algiers and Bujeyah, which lasted till 1517, when Barbarossa was master of them all. In 1505, and frequently afterwards, the Spaniards invaded the country, and took the principal towns. In one of these, in 1541, the emperor Charles V. lost the greater part of an immense fleet and army, and hardly escaped with his life. Haraydin, the brother and successor of Barbarossa, in 1530 put Algiers under the protection of the grand seignor, and for a long period the Ottoman court nominated the dey. In 1555, Bujeyah, the last of their possessions, was taken from the Spaniards. The power of appointing their own deys was obtained early in the 17th century, and in 1650 the Ottoman yoke was entirely shaken off.

Religion.] The Algerines are Mahometans, and more superstitious than the Turks. Their three chief ecclesiastical officers are the Mufti, the Cadi, and the grand Marabout.

Government.] The government is composed of the Dey, and the Douwan. The dey is chosen out of the army, each rank having an equal right, and every bold, aspiring soldier is an obvious candidate. Every election is usually attended with tumult and bloodshed. The dey, for a long period has been possessed of absolute power. When he exercises it tyrannically, however, he is always murdered. Scarcely one in ten has the good fortune to die in his bed. The next officer to the dey, is the aga, who is general of the Janizaries. He keeps the keys of the city, and issues, in his own name, all military orders ; but enjoys his post for two months only, when he is succeeded by the chiah or next senior officer. The chiah-bashaws, or chief colonels, are about 30 in number, and with the mufti and cadi compose the *Douwan*, which is now convened, as a mere matter of form, to sanction measures before resolved on.

Population.] The population of Algiers cannot be stated with accuracy. Hassel estimates it at 1,500,000 ; but does not give his authority.

Army.] The army amounts, in time of peace, to about 6500 men, of whom 4000 are Turks ; but 25,000 can be raised on an emergency.

Navy.] The navy consists of 8 ships, of from 36 to 50 guns, 10 or 12 sloops of war, and 30 gunboats, which never leave the harbor.

Revenue.] Hassel states the revenue, on the authority of Bruns, at £670,400, of which 450,400 are certain, and 220,000 accidental. Shaw says it was, in 1732, 300,000 from taxes, and about as much from accidental sources.

Manners and Customs.] The inhabitants are Turks, Moors, Cabyles, Arabs, Christians, and Jews. The Turks have been established since the middle of the 16th century. They form the highest rank in the country, and possess most of the offices and

employments. No native can be a Turk. He alone is considered one, who is born of Mussulman parents within the grand seignor's dominions. The number of Turks is about 10,000, and they are characterized as ignorant, proud, indolent, voluptuous, jealous, and revengeful; but at the same time, faithful, courageous, and tolerant. They pay no poll-tax, are punished only by an express order from the dey; when condemned to die, are strangled; purchase the necessaries of life lower than others, and may take as much fruit from gardens and vineyards, as they can eat. Their children, by Algerine women, are called *Coloris*. They are numerous, form a middle class between the Turks and Moors; and have more industry, and the same pride, courage, jealousy, and voluptuousness with the former. In size and strength, also, they resemble them, and the most expert artists and artificers are of this class.

The Moors are the descendants of those, who were driven out of Spain. Those, who live in towns and engage in commerce, have a degree of polish in their manners, and are many of them wealthy. Others are artificers and mariners, and in the lowest class of them are found most of the thieves and profligates of Algiers. Few of the Moors that live in the country are wealthy. They are ignorant and rude; strangers to the pleasures of social life, and distinguish themselves by their tribe. They practise polygamy, which is not done by the Moors in the cities. They are much more profligate than the Turks.

The Cabyles are the same people with the Berebbers of Morocco, though their language is more complex by an intermixture of Arabic. Many of them do not acknowledge the sovereignty of the dey.

The Arabs live in tents, and constitute numerous distinct tribes, many of which are independent of the dey, and the others are only tributaries. They live in the mountains, and in the desert, and are wilder than the Arabs of Morocco.

The Jews are not numerous, and are despised and oppressed. They cannot own land, nor ride in the city, or through the gates, and are obliged to wear a peculiar dress of a dark color. They are generally perfidious, and addicted to cheating and fraud.

The Christians are chiefly transitory residents. In the W. the Spaniards possess Oran and Massalquiver, where they keep garrisons. In the other towns the Christians are slaves, captured by the corsairs, and sold at auction. From 150 to 180 negroes are annually imported as slaves from the S. The women are often kept as concubines by the wealthy Turks. Slaves of any color, who turn Mahometans, gain their freedom. The Jews and Christians, who do this, are called *renegadoes*, and may be advanced to honorable and lucrative employment.

Cities.] ALGIERS, the capital, formerly Mesgana, is built on the west side of a bay of the Mediterranean. This bay opens between Cape Matisou, on the E. and Cape Caxines on the W. The mole, which forms the harbor, is 500 paces long, in the form of a semicircle, and reaches to a little island facing the town. The

harbor has anchorage in from 18 to 25 fathom water, and is defended by a castle with three batteries of cannon, which stands on the solid rock of the island, and serves also for a light house. At the south end of the island is another fort of three batteries, and there are several others along the coast. The walls are high, and 12 feet thick, flanked with square towers, but greatly decayed. The large ditch beneath is nearly filled up. There are five gates, which are open from sunrise to sunset. The town is built on a declivity, in the form of an amphitheatre, the houses rising gradually above one another, so that at sea their white terraced roofs look like a whitener's ground covered with linen. There is but one handsome street, which runs E. and W. through the city. The others are so narrow, that carriages cannot run in them. The houses are built of brick or stone, of a square shape, with a paved court in the middle. A chimney at each corner of the flat roof rises like a cupola. The palace of the Dey, in the middle of the city, has too spacious halls, one for the Dowan, and is a magnificent building. The barracks for the Turkish soldiers are also grand edifices. The mosques are numerous, and seven of them very large. The baths also are many and spacious. In 1732, Dr. Shaw computed the population at 100,000; now it is estimated at 80,000: in which number are included several hundred Jewish families. The city is supplied with water from the adjacent mountains, by two aqueducts, which distribute it to a number of fountains at convenient intervals. The environs are every where fertile, and pleasantly uneven, adorned with gardens, groves, and villas. The gardens are stocked with plenty of fruit-trees, melons, and pot-herbs. The villas are little white houses, shaded with a variety of fruit-trees and evergreens, and present a beautiful prospect at sea. Lon. 2° 12' 45", E. lat. 36° 49' 30", N.

TLEMSEN, the capital of the western province, stands on a rising ground, at the foot of several rocky precipices, from which issue a number of springs. The walls are of a composition of sand, lime, and gravel. About 1670, the greater part of the town was laid in ruins, and it has never recovered. Among these are found some fragments of Roman antiquities. In the west part of the town is a large basin, of Moorish workmanship, 200 yards long, and 100 wide. It may easily be filled from the adjoining hills.

ORAN is built on the declivity, and near the foot, of a high mountain, about 50 miles E. of Tlemsen.

BLEEDA, the capital of Titeri, is built under the shade of a spur of Mount Atlas, is a mile in circumference, and tolerably populous. The other towns are Marcara, Tenez, and Medea.

Manufactures.] There are manufactures here of silk, cotton, wool, leather, and other commodities. The carpets are good, but inferior to those of Turkey. In the city of Algiers there are looms for velvet and taffety, and a coarse kind of linen is made in most parts of the kingdom. The exports are ostrich feathers, wax, hides, wool, copper, rags, silk sashes, embroidered handkerchiefs, dates, and Christian slaves. Wheat and barley were formerly shipped, to the amount of 7000 or 8000 tons. The imports consist

chiefly of gold and silver stuffs, damasks, cloths, spices, the metals, naval stores, fire-arms, ammunition, paints, rice, sugar, soap, cotton, and drugs. The commerce of this country is chiefly carried on by the corsairs, and most of the imports are captures.

CHAPTER II.

NATURAL GEOGRAPHY.

SEASONS, AGRICULTURE, RIVERS, MOUNTAINS, BOTANY, ZOOLOGY AND MINERALOGY.

Seasons.] THE winds here generally blow from the sea, or from the east or west. East winds are common from May to September, and then the westerly winds become the most frequent. The southerly winds from the desert, are unusually hot and violent, but not frequent. When they blow for 5 or 6 days in July and August, they are very suffocating, and the inhabitants sprinkle the floors of their rooms with water or vinegar. The quantity of rain at Algiers averages 27 or 28 inches ; of which little falls in summer, and in most parts of the Desert, they have no rain at all.

Agriculture.] The first rains fall in September or October, after which wheat is sown, and beans are planted. Barley is sown about the end of November. The latter rains in April secure the crop. Rice, Indian corn, and millet, are also cultivated. The patriarchal mode of threshing is still continued. The sheaves are spread upon the threshing-floors, and horses or mules are driven over them. They winnow the grain by throwing it up against the wind with a shovel. Of the pulse kind, beans, lentils, kidney-beans, and the chick-pea, are the most abundant. Of the roots, herbs, and fruits, of the kitchen garden, they have considerable variety. The soil is generally fertile, more especially on the coast and in the valleys. There are few forests, but tracts of thickets and bushwood are more common. The district round Bugia supplies the greatest quantity of timber. In the south, the fertility is less, though even in the desert, and on its borders, there are some cultivated districts, which produce corn, figs, and dates.

Rivers.] The chief rivers of this country are the Zha, which runs across the Desert of Angad and Tlemsen, and falls into the sea near Tabecrita ; the Haregal comes down from the greater Atlas, crosses the same territories, and falls into the sea 5 leagues from Oran ; the Mina, a large river, which runs through the plains of Bathala, and empties near Arzew ; the Shelif, which descends from Mount Guanexéris, runs through the desert of Angad, the lake Titteri, and the province of Tlemsen, and empties near Mostagan ; the Celef, which runs only 60 miles, and falls into the Mediterranean, 3 leagues west of Algiers ; the Hued-Alquiyir, which runs down with a swift course from the

high mountains of Cuco, and empties near Bugia; the Suf-Gemar has its source on Mount Auras, on the confines of Atlas, and after watering the desert and the fertile plains of Constantina, where it receives numerous tributaries, falls into the sea a little east of Gigeri; the Ladag, which empties near Bona; and the Guadi, which comes from Tripoli, and empties near Tabarea.

Mountains.] Several smaller chains of the Atlantean range, lie beneath it to the north. These give birth to some of the rivers, and by some of them they are all broken. The mountain of Jurjura is the highest in Barbary, being about eight leagues in length, in a N. E. and S. W. direction, full of rocks and precipices, and only covered with snow in the winter. It is about 60 miles S. of Algiers, and is a noble spur from Mount Atlas.

Botany, Zoology, and Mineralogy.] The botany and zoology of this country are the same with those of Morocco. In the mountains are found lead and copper, and various other minerals.

TUNIS.

SITUATION AND EXTENT, HISTORY, RELIGION, GOVERNMENT, MILITARY FORCE, REVENUES, POPULATION, CITIES, MANUFACTURES, COMMERCE, MANNERS AND CUSTOMS, CLIMATE, SOIL AND PRODUCTIONS, RIVERS, LAKE, MOUNTAINS, ANTIQUITIES, ISLAND.

Situation and Extent.] THIS country lies next to Algiers, and is 300 miles long, from N. to S. and 170 from E. to W. Having the Mediterranean on the N. the same sea and Tripoli on the E. Tripoli and the desert on the S. and Algiers on the W. It is divided into two circuits, the northern, which the Bey rides through in the summer, and the southern in the winter.

History.] Tunis is the western part of the *Africa Prophria* of the Romans, and the ancient seat of Carthaginian power. After the destruction of Carthage, it fell under the dominion of the Romans, from whom it passed to the Goths, and then to the Vandals. The Saracens were its next occupants, who governed it by vice-roys, or emirs, till at length it was conquered by the emperor of Morocco. After a short subjection, it became an independent and powerful kingdom. In 1538, during the Spanish attacks on the Barbary States, it was seized by Barbarossa, and became subject to Turkey. About 120 years the Tunisians claimed the right of electing their own Beys, and since that time they have been independent.

Religion, Government, &c.] The religion is the Mahometan. The government is now despotic and hereditary. The Bey nominates his successor, and is not confined to his own family. The

Douwart now retains only the shadow of authority, and is composed of the creatures of the Bey. It was formerly possessed of considerable power. The Bey is able, at any time, at a short warning, to bring from 40 to 50,000 men of his militia into the field, more than three fourths of which are cavalry. He has besides in his service about 6000 Turks, who are reckoned better soldiers than the natives.

Revenues.] The revenues of the Bey are regular and accidental. The regular revenue arises from the tythes of produce, the domains, licences to trade, duties, monopolies, taxes on the Jews, and from the sale of slaves. It amounts to about 6000 piastres. The accidental revenue arises from extortions, from seizures of the wealth of those who die, and from the Bey's profit in trading. The present Bey is extremely rich. He is called Hammuda Basha Bey, and ascended the throne in 1782, being then 30 years old. He is a man of superior talents.

Population.] The population of the country is estimated at 3,000,000; (though Hassel estimates it at 1,000,000 only) of whom 100,000 are Jews, and 20,000 Christians. A plague in 1785, and a famine in 1803, swept off great numbers of the inhabitants.

Cities.] The city of Tunis is situated on a rising ground on the west bank of a lake, about 6 miles from the head of the Gulf of Tunis. This lake is of salt water, and is connected by a narrow passage with the sea. The city is enclosed by a miserable wall of mud and stone, neither useful nor ornamental. The houses are of stone, but of the most miserable architecture. The new palace of the Bey, the only decent building in the city, is occupied by shops on the ground floor, and stands in a very unpleasant situation. The streets are narrow, dirty, and ill paved. The cisterns furnish the only supply of fresh water. The bazars, or shops, are miserable buildings, and indifferently stocked with merchandise. The port of Tunis is at the Goletta, or entrance of the Lake, through which there is a constant current from the sea. Here are two forts built by the Spaniards in the time of Charles V, in tolerable repair. At the upper end of the city is the gaspa, or citadel, built also by the Spaniards, which commands the town, and might keep it in complete subjection. The population of Tunis probably exceeds 100,000. The Tunisians estimate it at 150,000. JERBA is an interior manufacturing town.

Manufactures.] The chief manufactures are those of scull-caps, woollen stuffs, and morocco leather. The caps are of Spanish wool, and are dyed of a crimson color at Zaivan, about 30 miles from Tunis; because the waters of that place communicate a singular richness to the coloring. Formerly 50,000 people were occupied in this manufacture, and 3,000 bales of Spanish wool were consumed by it, with a clear profit, after all expenses were deducted, of 7,000,000 piastres. At present it is reduced to one third of its original extent. They are sold on the Barbary coast, and in the Levant. The woollen stuffs are of a thin texture, but extremely beautiful, and many thousands are occupied in making them. They are the common dress of the inhabitants.

The exports consist of grain of different kinds, oil, wool, hides, wax, soap, dates, senna, madder, coral, oil of roses, and ostrich feathers.

Commerce.] Tunis has an extensive commerce with the interior of Africa, by means of caravans. These go not only to Timbuctoo and other places in Soudan; but crossing the Niger, and the mountains of the Moon, they visit the coast of Guinea. Three of these caravans arrive yearly at Tunis. They bring gold dust, senna, ostrich feathers, and black slaves; and carry away cloths, muslins, linen, silks, morocco leather, cochineal, and spices. Caravans also, in time of peace, pass and repass from Constantina, in Algiers, bringing hides and bees-wax, and carrying away European and Tunisian manufactures. Caravans from Gerida, the country of Dates, come loaded with the fruit of the palm, and a few coarse woollens. Those from Jerba, a town in the interior of Tunis, bring immense quantities of the woollens so much worn by all classes.

The commerce with Algiers has for a long time been interrupted by war, in which the Tunisians have generally been successful. The foreign commerce also is extremely shackled by monopolies, and by the privileges which the present Bey, who is the first merchant in the regency, secures to his own mercantile connections.

Manners and Customs.] The Tunisians are more superstitious than other mussulmen. They will not allow Christians to approach their mosques. These buildings are numerous and inhabited by many saints, who are all distracted people, and are believed to have the power of prophesying and working miracles. The merchants of Tunis are universally dishonest, and avarice is a common characteristic of all classes. The inhabitants, however, are more polished in their manners, and discover less of the savagery in their character, than those of the other Barbary States. They have scarcely any of the common jealousy of Mahometans. The Tunisian women are not confined to the Haram, but are at liberty to walk the streets as freely as the ladies of Europe.

Climate.] The climate of this country is commonly salubrious and pleasant. Rain is rare in the summer. The season for it usually commences in October, and lasts till April.

Soil and Productions.] The soil is every where rich and yields an abundant harvest. In the eastern part of the country, it produces, in a favorable year, one hundred fold. The annual crop of wheat in the regency, is estimated at 7,200,000 bushels, and with the proper cultivation might be tenfolded; that of barley is still greater; that of beans 180,000 bushels, and that of Indian corn 90,000. The produce of the oil of olives is estimated at 5,130,000 gallons, and every third year a greater crop is expected. Of this one fourth is fine eating oil, and the rest is used in lamps and the manufactures. The quantity of wool exported is only about \$,000,000 lbs.; but the quantity raised in the regency is immense. About 100,000 hides are annually exported. The bees-wax is excellent, and about 27,500 lbs. are annually collected. The barilla of Tunis is excellent, and the quantity of soap depends upon the

demand. The Tunisian oil of roses will command sixteen times the price of that made in the Levant.

Spring water, in the country, is generally either salt or hot. The inhabitants, however, drink it without inconvenience. The hot baths of Gurbis are celebrated. Rain is never known in the south country, particularly in Gerida. The palm tree is there watered by the hand, and the water of the rivers is hot and brackish. The black cattle are small. The mutton is not esteemed. All the sheep are of the broad-tailed breed. Goats are numerous. The horses are a degenerate race. The mules and asses are good, and much used. Camels are the ordinary beasts of burden. The race of dromedaries is almost extinct. The wild animals resemble those of Morocco.

Rivers, &c.] The chief river is the Mejerda, the ancient Bagrada. There is a large lake in the interior, called Lake Lowdeah, the *Palus Tritonis* of the ancients. It is not yet ascertained whether the chain of mountains crossing the regency in a N. E. direction, and terminating at Cape Bon, is the real Atlas, or merely a spur from it.

Antiquities.] The ruins of Carthage are 15 miles N. E. of Tunis. It was built B. C. 869, in the time of Livy, was 23 miles in circumference, and at the beginning of the third Punic war contained 700,000 inhabitants. It was many times destroyed, and again rebuilt; but the last destruction, by the Saracens, A. D. 698, left few traces, even of its ruins. All its remains in 1732, were the area of a spacious room, on one of the hills, with several smaller ones at a little distance; the common sewers, not in the least impaired by time, and the cisterns, which are nearly perfect.

Island.] The little island of Tabarka, near the mouth of the Zaine, the western frontier, is highly valuable for its coral fishery. About 150 boats, each manned by 10 men, are annually employed in it from Sicily and Naples, who pay a premium for the permission. The French keep a consul here, merely to attend to their interest in this fishery.

TRIPOLI, INCLUDING BARCA.

BOUNDARIES AND EXTENT, HISTORY, RELIGION, GOVERNMENT, &c.
CITIES, SOIL, &c.

Boundaries and Extent.] This extensive country has Tunis on the W. the Desert on the S. Egypt on the E. and the Mediterranean on the N. Its length, on that sea, from the Gulf of Cabes, or Lesser Syrtis, to the Tower of the Arabs, is about 1100 miles. The breadth of the western part, or Tripoli Proper,

about 200 miles ; while that of Barca is about 90 or 100. It contains 194,420 square miles.*

History.] This country comprehends the ancient *Regio Syrtica*, or the country between the two *Syrtes*, in the W. *Cyrenaica* in the middle, and *Marmarica* in the E. Like the other Barbary states, Tripoli was a successive prey to the Romans, Vandals, and Saracens. It afterwards fell under Morocco, Fas, and Tunis, and during this period the capital was taken by the Normans from Sicily, in 1146, and retained till 1159. The inhabitants, about 1450, shook off the Tunisian yoke, and chose a monarch of their own. The emperor Charles V. took the capital soon after he ascended the throne, and with the knights of Malta, retained it a little more than 40 years, when it was taken by the Turks, in the reign of Solyman. The Turkish influence has continued from that time to the present, though now considerably impaired.

Religion, Government, &c.] The religion is the Mahometan. The governor is a Turkish bashaw, but possesses little authority. Tripoli Proper is divided by the Turks into seven provinces, over each of which is placed a Bey.

Population.] The population of Tripoli is 1,000,000. The army amounts to 6000 land troops. The government has one 50 gun ship and 6 galliots. The revenue amounts to 750,000 guilders. The sultan of Fezzan is powerful and respected. He pays no tribute to the pasha of Tripoli, but presents him annually with a few negro slaves.† The settled inhabitants resemble those of the other states of Barbary in their manners, customs, classes, and character.

Cities.] TRIPOLI, the capital, stands on the Mediterranean, on a sandy plain of considerable extent, and is surrounded by high walls and stout ramparts, and is flanked with pyramidal towers. The wall has an inland gate on the S. and another towards the sea. The harbor is a very fine one, and the western side of it is defended by a strong castle, and by fortifications in the modern style. The town was extensive and magnificent, till destroyed by Omar II. The streets are now narrow, dirty, and irregular ; and the houses low and mean. The inhabitants procure their fresh water from cisterns. They have few slaves, and manufacture great quantities of linen. The harbor is much frequented by corsairs, who capture many of the Levant ships. The hills which limit the view S. of the town, are covered with forests of palm trees ; lat. 32° 35' N. lon. 13° 12' E. 275 miles S. E. of Tunis, and 570 E. S. E. of Algiers.

DERNE is the chief town of Barca, and stands about half a mile from the Mediterranean, in lon. 22° 55' E. The soil around it is fertile and productive. Derne, in 1805, was the scene of the exploits of the gallant general EATON, and his handful of intrepid Arabs.

The other chief towns of Tripoli are Gerbi, Mesurada, and Kasr Ahmed ; and of Barca, Porto Raccalino, Porto Tabarca, Sollona, and Angela.

* Haesel..

† Ibid.

Soil, &c.] The soil of this country is generally barren, and most of the settled inhabitants live in the towns on the coast; but the great body of the population is composed of the Bedouin Arabs, who wander in search of prey over the pathless wilds of the desert. Barca itself is merely a northern arm of the great Sahara.



EGYPT.

CHAPTER I.

HISTORICAL GEOGRAPHY.

EXTENT, BOUNDARIES, DIVISIONS, NAMES, HISTORY, ANTIQUITIES, RELIGION AND GOVERNMENT, POPULATION, ARMY, REVENUE, MANNERS AND CUSTOMS, LANGUAGES, CITIES, COMMERCE.

Extent.] THE length of Egypt, from Syene in lat. 23, to Cape Burlos, the northern extremity of the Delta in lat. 31 3 N. is 560 miles. Its greatest breadth, on the Mediterranean, from the Tower of the Arabs, in lon. 29 48 E. to its eastern limit between Refah and Gazah, in lon. 34 30 E. is about 280 miles. S. of the Delta, however, the cultivated part is merely a narrow strip, divided by the Nile, and terminated on the E. and W. by parallel ridges of hills, or mountains. The desert, included between this valley and the Red sea, is, however, geographically included in the territory of Egypt, while that on the W. is assigned to Barca and Sahara. The average width of the country, therefore, from Suez S. is about 170 miles.

Boundaries.] On the N. is the Mediterranean; on the E. Arabia Petraea, the gulf of Suez and the Red sea; on the S. Nubia; and on the W. Barca and Sahara.

Divisions.] This country is usually divided into Upper and Lower Egypt. Lower Egypt is called Bahri, and includes the country N. of Cairo and Suez. Upper Egypt commences a little S. of Cairo, and is divided into Vostani and Said. Vostani terminates at Siut, or Assiut, north of which town the crocodile is never known to advance.

Names.] Egypt is sometimes called in the Bible, the Land of Ham; but generally Misraim, and the land of the Misraim or children of Mesr, one of the sons of Ham, by whom it was peopled soon after the flood. The Arabs still call it Mesr or Massar. The Greeks gave it the name of Egypt.

History.] 1. According to Blair, Mesr, the son of Ham, settled in Egypt and established the Egyptian monarchy, in the year B. C. 3188.

2. After an unascertained succession of kings the country was invaded by the *Aurite*, *Hycos*, or *Shepherds*, a band of fortunate adventurers from the E. Manetho says they were Arabians. Bryant supposes them to have been Arkites, expelled from Babylon by the children of Shem; at the time of the second dispersion. Usher places their invasion of Egypt in the year B. C. 2048. They drove the original inhabitants into Upper Egypt, and held the dominion of Lower Egypt, till the year B. C. 1825. They went from Egypt to Phenicia, Syria, Greece, and other regions, carrying with them their inventions and improvements. The original monarchy was then reestablished.

3. Jacob went down to Egypt with his family from Canaan, and settled in the land of Goshen B. C. 1706. His posterity remained there 215 years, and in 1491 B. C. departed. The Egyptian king, supposed to have been Amenophis, the father of Sesostris, following after them, was drowned with his host in the Red Sea.

4. The monarchy was overthrown by Cambyses the son of Cyrus, who made Egypt tributary to Persia B. C. 525. The inhabitants revolted from Artaxerxes Longimanus B. C. 463, but were soon reduced. They revolted again from Darius Nothus, B. C. 414, and for a short interval enjoyed their own kings, but were reduced again B. C. 350.

5. Alexander the Great having overrun Persia, invaded Egypt, B. C. 331 which submitted to him without resistance.

6. After his death, Ptolemy, one of his generals, took possession of the country, B. C. 323. He and his posterity sat on the throne 283 years. The last of them was the infamous Cleopatra.

7. Augustus Cæsar reduced Egypt to a Roman province, B. C. 30: and entrusted the government of it to several Roman knights.

8. Amrou, the general of Omar the caliph of the Saracens, subdued Egypt A. D. 640. The country under his administration became rich and populous, and Amrou opened a canal 80 miles in length, between the Nile and the Red sea.

9. Saladin A. D. 1174 conquered Egypt, as vizir of Nuroddin, caliph of Bagdad, established the empire of the Turks in Africa, and soon assumed the title of sultan.

10. In the year 1250, the Turkish empire was overthrown by the Mamelukes. These were originally slaves, procured from the regions of Caucasus, who were taken prisoners by the Tartars in 1227, and to the number of 12,000 were bought by the sultan, and educated at his expense as soldiers. They were introduced into Egypt to maintain the existing government, and by their superior skill and bravery became, in about 30 years, absolute masters of the country, and chose a sultan from among themselves. They constantly replenished their numbers by purchasing Circassian slaves, and educating them as soldiers.

11. Selim, the Turkish sultan, in 1517, reconquered Egypt, and annexed it to the Turkish dominions. The conquest was a bloody one, and many of the Mamelukes were massacred. Out of those that remained, Selim appointed the governors of the 24 provinces into which he divided Egypt, with the title of *Reys* or *Saga-*

giacs. The government of the whole country he left to a Turkish bashaw; but the chief power was lodged in the hands of the beys, as his divan, who were even authorized to displace him for proper reasons.

12. The Turkish power, at first considerable, at length grew weaker and weaker, and the beys had the supreme control for a long period, acknowledging the sovereignty of the grand seignor. But in 1746, Ibrahim Kiaya, of the Janizaries, rendered himself master of the country. He was followed in 1766, by Ali Bey, and he by Mohammed Bey in 1773. From that time the Beys were constantly contending for superiority, till 1798, when they and the rest of the Mamelukes were compelled to unite, in order to resist the French, under general Bonaparte. The French armies drove the Mamelukes before them, as far as Syene, and on their return were driven out of Egypt by the British troops, under Sir Ralph Abercrombie, in August 1801.

Antiquities.] The pyramids of Egypt are the most wonderful monuments of ancient architecture. Three large ones are nearly opposite Cairo on the W. side, about 11 miles from the river's bank. They stand in the desert, and a large mass of each has been covered by the sands, which have been piled up around them. Their bases are squares, and each side an isosceles triangle. The four corners of each point to the four cardinal points. The length of one side of the base of the largest is about 700 French feet; Herodotus made it 800. Its height is now upwards of 600; Herodotus made it just equal to a side of the base. It is composed of layers of flat, calcareous stones, 212 in number, and from 2 to 4 feet in height, which overleap each other, and thus form steps from the bottom to the top. The interior contains various rooms, one a large parallelogram, the roof of which is composed of seven enormous stones of granite, which reach from one wall to the other. At one end of it is a *sarcophagus* made of a single block of marble. To these rooms the light of the sun never penetrated, and for a long period they have been tenanted by immense numbers of bats, who remain here undisturbed, from century to century, except when the unwelcome lamp of the traveller faintly illumines their dark retreat.

On the east side of the second pyramid is the sphynx, an enormous mass of one solid stone, of which the head and neck only are visible above the sand, and are 27 feet high. The distance from the ear to the neck is 15 feet. Pliny says that the head was 102 feet in circumference, and the body, (he probably means the whole figure from the feet to the neck) 143 feet high.

At Saccarah, about 18 miles farther south, there are also many pyramids, one of which is as large, but not as high, as the one we have described. There are others at Meidum and Hilahum, still farther up the river.

The Egyptian catacombs are grottoes and subterranean excavations for the burial of the dead. Those of Alexandria begin where the ruins of the old city terminated, and extend along the shore for a long distance. They consist of long galleries with apartments.

on each side excavated in the rock. In the sides of these apartments are three tiers of holes, or niches, where the bodies were deposited. These galleries sometimes cross each other, but are generally parallel. The niches have all been despoiled of their mummies. Near the pyramids of Saccara is a series of catacombs, extending about half a mile. They are entered by various wells 4 feet, and from 20 to 30 deep, cut through the rock. At the bottom is a passage 50 feet long and 5 wide, which leads to a gallery of the same size, 6 feet high. On one side of this gallery there are apartments with platforms 2 feet high, and on the other, narrow cells for coffins. To this succeeds another gallery much narrower, with niches for upright coffins. There are similar excavations near Siut and at Gebel Silsilis. But those of Thebes are far more extraordinary. They are on the N. W. of the city, on a step of the lower part of the Lybian chain, an arid and desolate spot, devoted by nature to silence and death. The rock cut down on an inclined plain presents three sides of a square, in which double galleries have been excavated, and behind them sepulchral caves. These excavations occupy a space of nearly a mile and a half square, and are called the Necropolis. A little farther N. are the sepulchres of the kings of Thebes. Of these there are 18, of which only 9 can be entered. The entrance of each grotto is a square doorway opening into the rock, through a long arched gallery 12 feet wide, and 20 high, every where richly ornamented with painted and sculptured hieroglyphics. Four or five of these galleries, one within the other, generally lead to a spacious room containing the sarcophagus of the king, composed of a single block of granite, 12 feet long by 8 wide, square at one end, and rounded at the other. They are covered by a lid of enormous thickness, shutting with a groove. The figure of the king is sculptured on the lid.

Religion and Government.] The great body of the present inhabitants are Mahometans. The Copts are Monophysite Christians, who hold that the divine and human nature in Jesus Christ, were so blended as to make but one nature. This is also the doctrine of the Syrian, Armenian, and Abyssinian churches. Egypt had been a Christian country a long time, when Amrou, in 640, conquered it, and introduced Mahometanism. The Greeks and Monophysites were then very numerous in Egypt, and the former, aided by the Greek emperor, persecuted the latter, and reduced them to poverty and distress. The Greeks fought Amrou, and were expelled the country; the Monophysites received the Saracens, as the deliverers of their church. Their patriarch resides at Cairo, though called the patriarch of Alexandria. Their second officer, the patriarch of Jerusalem, resides at the same place, and is merely a bishop of Cairo. He goes to Palestine every Easter. The subordinate officers are bishops, archimandrites, priests, and deacons. The clergy are divided into secular and regular, are extremely ignorant, and are allowed to marry. They have monasteries and nunneries. Their worship is very disorderly. They have three liturgies. The Copts are numerous in

the Said, where, in the desert of Nitria, they have a very large monastery strongly fortified. As to the government, it is difficult to say, who at present have the dominion over the country. The Turks however still claim it as a province ; but since the French and English invasions their authority has been annihilated.

Population.] Hassel estimates the number of inhabitants at 3,500,000. Volney calculated it at 2,300,000. This population is divided into various classes. I. The *Cophti*, or Copts, are descended from that mixture of Egyptians, Persians, and Greeks, who, under the Ptolemies and Constantines, were so long in possession of Egypt. Several families of them are found in the Delta. Numbers also live at Cairo, where they form the class of writers, the head of which is the writer to the principal Bey, who disposes of all employments in that department. They are here the intendants, secretaries, and collectors of government. But the great body of them is in the Said, or Upper Egypt, where, in some places, they occupy whole villages. II. The Arabs. These are of three kinds. 1. The Saracenic Arabs are the descendants of the followers of Amrou, who came into Egypt in 640. They are husbandmen and artisans. 2. The Mograbians, who have arrived at different periods, and under different chiefs, from the W. and united with the former. They are emigrants from the Barbary States, and descendants also of the early Saracens. They are settled chiefly in the Said, where they are artisans and husbandmen. 3. The Bedouins, or *Bedowees*, the ancient *Scenites*, or dwellers in tents, are the Arabs of the desert. They live in small independent tribes, wandering from place to place, and are only robbers and marauders. In Egypt they roam between the Nile and the Red sea, and along the isthmus of Suez, and along the skirts of the western mountains ; and number in all about 30,000 horsemen. III. The Turks are settled chiefly about Cairo. They claim to be the dominant nation, but have now no influence. They are chiefly artisans, priests, and military officers, and are not numerous. IV. The Mamelukes are chiefly Georgians, Circassians, and Mingrelians. They have the flaxen hair so universal at the foot of Caucasus, and marry only with slaves from that country, who are constantly sold in the market. They never have descendants beyond the second generation, and those are greatly inferior to themselves in activity and energy. Hence they are constantly obliged to replenish their number by youths from Georgia, and the neighboring countries ; who are brought to Egypt, sold as slaves to the Mamelukes, educated as soldiers, and then set free. V. The Jews devote themselves to commerce and manufactures. Many of them are goldsmiths, and their works in filagree, and precious stones, are greatly admired. Some of them manufacture light stuffs out of Bengal cotton, and Syrian silk. VI. The Berebbers, *Brebes*, or *Barabras*, in the upper part of the Said, and in Nubia, are undoubtedly the descendants of the earliest Egyptian colonists, of those who were driven from the Delta by the shepherds, to the country which they now occupy. They have a common name with the Berebbers of Mount Atlas, and in com-

mon with them pass as the descendants of the aboriginal Africans. Those of Egypt are probably, however, less intermixed with other nations ; for those of Morocco are known to have sprung from the inhabitants, who occupied that country at the time of the Saracenic invasion ; and those were a mixture of Egyptian colonists, of Phenicians, and of Romans.

Army.] The regular military force of Egypt should be 20,000 infantry, and 12,000 cavalry. At present it is not possible to ascertain its actual amount. Every Bedouin however spends his life in arms.

Revenue.] The regular sources of the Egyptian revenue are the customs, a land tax, and a capitation tax on Jews, and Christians. The amount of the customs of Alexandria, Damietta, Rosetta, Suez, Cosseir, Cairo, and Assiut is very considerable. The Beys make the land tax yield a million and a quarter sterling, and even more ; though regularly it should produce only £420,000. The capitation tax is supposed not to exceed 1500 purses, or £73,000. The whole regular revenue may be calculated at 2,000,000 sterling. The uncertain revenue is obtained by extortions, and is very great, but merely enriches the individual plunderer. The principal copt, the secretary of the ruling Bey, had the control of the taxes. He was the comptroller and farmer-general, regulated the customs, appointed the collectors, had various monopolies, and was, in short, the despot of commerce. The copts under him had registers of each village, and were extremely rigorous in exacting the land-tax. The customs were formerly farmed to the Jews ; but when they were ruined by the extortions of Ali Bey in 1769, this branch of the revenue went into the hands of the Syrian Christians of Damascus, of whom there are about 500 families in Cairo, all very opulent.

Manners and Customs.] The Copts have a dusky brown complexion ; dark hair and eyes, the former often curled like that of Europeans, but not at all like the wool of the negro, aquiline noses, and lips usually of moderate thickness. Their women have large black eyes, and a genteel form. They are despised by the Turks and hated by the common people. The Saracenic Arabs have a complexion nearly black, and are taller and more robust than the present inhabitants of Arabia. They have deep, lively, and penetrating eyes, a short beard hanging in filaments, lips thin, and open, displaying fine teeth, fleshy arms, and much activity of body. The Bedouins are divided into tribes, each of which has a distinct portion of land. They live in tents, and sleep on the ground. They have numerous camels, live on their milk and on dates, and are constantly roaming from one place to another. They are generally about five feet, two inches high, and have a deep, tawny complexion. Their great business is robbery and plunder. The Berebbers have neither flesh nor fat, but simply bones, nerves, muscles, and tendons. Their skin is of a shining, jetty black. Their eyes are deep and sparkling, with the brows hanging over ; the nose pointed ; the nostrils large ; the mouth wide ; the lips of moderate size ; and the hair

scanty, and in scattered locks. They wear a piece of white woolen cloth, and subsist on almost nothing. Many of them go down to Cairo, and are employed to guard the magazines and timber-yards. They are faithful, and strongly attached to their masters.

Languages.] The Arabic is spoken by all the Arabs, by the Copts, the Jews, and the Greek and Syrian Christians. The Mamelukes speak both that and the Turkish, as do some of the Turks. The Berebbers have a language of their own, but those who live at Cairo, and probably some of those on the frontiers, speak Arabic. The Copts have also an appropriate language, called the Coptic; but for three centuries they have ceased to use it, except in their religious services. In these they rehearse the Gospels and Epistles twice over, first in Coptic and then in Arabic. This language is a mixture of the ancient Egyptian and the Greek. From the time of Ptolemy the Greeks abounded in Egypt for nearly 1000 years, till they were banished by Amrou. The language of the earliest colonists before corrupted by the intercourse with the shepherds, the Jews, and the Persians, now lost much of its oriental character. The Greek letters, first taught in Egypt, in the reign of Psammeticus, about 660 B. C. became in a measure the national alphabet. In the Coptic version of the New Testament, made a long time before the invasion of Amrou, the letters, in their form and names, have a strong resemblance to those of the Greek, and in their force are exactly the same, with the addition however, of seven sounds from the old Egyptian, which the Greek had not. A great number of the words, also, are pure Greek; the rest are Egyptian, with a very few Arabic. The declensions of the nouns and verbs, even of those from the Greek, are made as in the Hebrew, by prefixes, and not by a change of termination.

Cities.] CAIRO, or GRAND CAIRO, was founded A. D. 968, by Jauhar, general of Moaz, the first caliph of the race of the Fatimites. It stands on the E. side, nearly a mile from its bank, and about 10 from the angle of the Delta. To the E. and S. E. at a small distance lies the ridge, called Mokattam, of the extensive chain which runs parallel with the Nile to Upper Egypt. This ridge is here totally destitute of verdure, and presents nothing to the eye but dry sand and stones calcined with the sun. To the N. a fertile plain reaches to the Delta. Immediately under the mountain is the castle, nearly a mile in circumference, which commands the town, a place of great strength before the use of cannon. Within the castle is a well, called the well of Joseph, 280 feet deep, and 42 in circumference. The walls of the city are 9 miles in circumference. Its length from N. to S. is nearly 3 miles, and its breadth 2. The streets are narrow, crooked, and unpaved, intersected here and there with large vacancies, which become lakes during the increase of the Nile, and are gardens the rest of the year. They are greatly infested with dogs. The Khalig, or canal of Amrou, traverses Cairo from N. to S. and loses itself 12 miles E. of the city, in the lake of the pilgrims. It formerly extended to the Red sea; but eastward of that lake it is

now entirely choked up, and the part which remains contains no water, except during the inundation. During the rest of the year, it is a mere receptacle for the filth of the city. The principal street runs parallel to the Khalig, and on this canal are all the houses of the Europeans. The houses of the city are chiefly of earth and bricks, badly burnt; the rest are of a soft stone, from the neighboring mountains. They have two or three stories, over which is a flat terrace of stone or tiles. They look like prisons, for they have no windows towards the street, and the doors are extremely low. Those of the wealthy have a large square open inner court, planted with flowers and fruit trees; through which light is admitted into the various rooms. The front door also opens into a vast hall, paved with marble, and ornamented with a fountain in the centre, which spouts into a marble reservoir. The floors of the rooms in these houses, are generally covered with mats and matrasses, over which is spread a rich carpet, on which they sit cross-legged. Around the wall is a sort of sofa with cushions to support the back and elbows, and above, a range of shelves, ornamented with porcelain. The windows have no glass, but only an open lattice work. Mr. Browne estimates the population at 300,000. The Saracenic Arabs form the body of the people. The Copts are numerous. The Mamelukes are about 12,000 in number. The Syrian Christians have upwards of 500 families. There are some Greeks and Armenians. The Mograbians have a distinct quarter assigned them, and are frugal and industrious. Few of the Turks are steady residents. The Jews are numerous. There are many negro slaves from Guinea, and a number of Berebbers from Said and Nubia. The women are generally well formed, but not tall. Those of the higher ranks are tolerably fair; they marry at 14, and are passed their prime at 20. Among the amusements, are dancing girls, and rope dancers; chess and drafts are favorite games. Fireworks are occasionally exhibited. The ladies, on Friday, make parties of pleasure to a mosque without the walls, and in gondolas, on the increase of the Nile. The diseases here prevalent, are ophthalmia, syphilis, hydrocele, malignant fevers, and the plague. The mean annual heat is 73°. Within the walls are more than 300 mosques, most of which have several minarets or high steeples, surrounded with galleries. They have no bells. The people are assembled by criers, about 200 of whom are employed at once, in every quarter of the town. The city abounds with large and sumptuous reservoirs, which supply passengers with water, and also with commodious and magnificent baths. Cairo had once an extensive commerce, and it is now the metropolis of the trade of eastern Africa. Caravans leave it for Syria, Arabia, Abyssinia, Sennaar, Darfur, Fezzan, Tripoli, Tunis, and Morocco. The okals, or warehouses, for wholesale goods, are spacious, strongly built, convenient, and clean; the bazaars are extensive buildings, with convenient shops, each trade being allotted its own quarter, and having its own shiek, or leader. There are manufactured in the town, indifferent sugar, sal-ammoniac of an excellent quality, glass lamps, salt-petre, coarse gun

powder, red and yellow leather, and linen cloth, of the fine Egyptian flax. The silk stuffs also are carried to a high degree of perfection. To the N. E. of the town, are extensive gardens, and elegant country houses. The ground under the mountains, to the E. is filled with tombs.

Between Cairo and the river lies Boulac, which is really a suburb, and is the port of Lower Egypt. It extends nearly 2 miles along the river, but is narrow. Here all the merchandize is landed from the Mediterranean. It was taken by the French under Bonaparte, July 23, 1797, but afterwards abandoned. Lon. 31° 27' E. lat. 30° 2' N.

ALEXANDRIA, called by the inhabitants *Scanderia*, was built by Alexander, B. C. 332, 12 miles west of the Canopic branch of the Nile. The lake Mareotis bathed its walls on the south, and the harbor on the north. For 1800 years it was the grand emporium of eastern commerce. Diodorus Siculus says it was 11 miles in circuit, and contained 600,000 inhabitants. When taken by Amrou, it consisted of three towns, *Menna*, or the part including the island of Pharos; Alexandria Proper, or the modern Scanderia; and Nekita, or the Necropolis of Strabo. The modern city is built near the brink of the sea, on a kind of peninsula, on each side of which is a harbor. That on the east, assigned to Europeans, has an entrance clogged with sand, a rocky bottom, and is very unsafe. The other to the west, is called the port of Africa, and is much larger and nearer the town. The walls are 6 miles in circuit. They are flanked with large towers at the distance of 200 paces. Much of the inclosed space is occupied with ruins. The streets are narrow, irregular, and unpaved. The commerce of the town is now of considerable importance. The languages spoken here are Arabic, Italian, and the Lingua Franca. The reservoirs, built 2000 years ago, vaulted with much art, and extending under the whole town, are still entire. They furnish the whole supply of fresh water to the city. The front of Cæsar's palace is still standing, and a few of the porphyry pillars. One of Cleopatra's needles is still standing. The other is thrown down. They are two obelisks, each a single stone, 60 feet high, and 7 feet square at the base. The lake of Mareotis is now filled up by the sands of the desert, and the island of Pharos has become a part of the continent. Pompey's pillar, and the catacombs, are half a league south of the walls. The canal of the Nile communicates with the eastern harbor. It is 40 miles long, and was cleared out, by the order of Bonaparte, in 1798.

DAMIETTA stands on the eastern bank of the eastern branch of the Nile, about 2 miles from its mouth. The river has here a semicircular bend, which gives that form to the city, and the eastern bank is merely a narrow tongue of land, from 2 to 6 miles wide, between the river and lake Menzale. The houses are lofty, and have generally handsome saloons built on the terraces. It has several large public squares. The bazars are well built, and filled with merchants. The commerce of the town is carried on almost wholly by Christians, from Damascus and Aleppo. Sey-

eral large mosques, with lofty minarets, are scattered over the city, and the public baths are lined with marble, and admirably well attended. The harbor is indifferent, but constantly crowded with vessels. The population is about 80,000. The environs are singularly fertile, and throughout the year present flowers, fruits, and harvests. The climate is always temperate and healthy. In the neighborhood of the town are many pleasant and flourishing villages.

ROSETTA is built on the west bank of the west branch of the Nile, and is now about 6 miles from its mouth, although it stood upon the shore when it was founded in the 8th century. It extends on the river 3 miles, and is 1 mile wide. The streets are nearly straight, and are wider than is usual in Egypt. The houses are handsome. Several of the mosques are magnificent. Extensive gardens lie north of the city, in which citron, orange, date, and sycamore trees are promiscuously planted. The commerce of the town is extensive.

SUEZ is built on a peninsula, at the head of the Gulf of Suez, in the midst of a desert. The houses are indifferently built, and stand so near together that there are but two passages into the city. The only water comes from Naba, 6 miles off, on the other side of the gulf, and the only provisions, except fish, from Cairo, and from places in Arabia still farther distant. The population is small. The commerce, by caravans, with Cairo, and by sea, with Jidda, is extensive.

COSSEIR lies on the west shore of the Red Sea, in lat. 26 8, N. and lon. 35 4, E. about 280 miles S. E. of Suez. It stands among hillocks of floating sand, and is defended by a square fort of hewn stone, with three square towers in the angles, mounted with four guns. The houses are built of clay. The inhabitants are Arabs, from the opposite shore. The harbor is formed by a rock, which runs 400 yards into the sea. Rough and lofty rocks of porphyry and granite environ the town at a small distance. The number of settled inhabitants is small, but great numbers of strangers are constantly passing and repassing. The commerce is considerable, particularly in coffee.

SIUT, or ASSIUT, is built on the ruins of the ancient Lycopolis, and stands about 2 miles from the west bank of the Nile, and about 200 in a direct line S. of Cairo. It is a large, populous, and well built town, and the see of a Coptic bishop. The gardens abound with vegetables and fruits.

GIRGEH is the chief town of the Said, and stands close to the west bank of the Nile, which grazes its walls, and 80 miles in a direct line from Siut. It is 3 miles in circumference, and contains several mosques, bazaars, and squares.

SYENE is on the east side of the Nile, and on the confines of Egypt, about 200 miles S. of Girgeh. The houses are indifferent, but the population is numerous, and its commerce, in senna and dates, is extensive. The island of Elephantina is opposite the town. The ruins of the ancient Syene are on a hill a little south. The ancients supposed that it lay directly under the trop-

ic. Eratosthenes here made the first attempt to measure the circumference of the earth.

Commerce.] The commerce of Egypt is on the Mediterranean, on the Red Sea, and over land by caravans. The chief harbors on the Mediterranean are Alexandria, Rosetta, and Damietta. From these are exported rice, and linseed in immense quantities, kali, linens, flax, sal-ammoniac, sugar, grain of various kinds, the flower of the charthamus, dates, oranges, figs, lemons, and pomegranates, all the produce of the country; coffee, assafœtida, senna, cinnamon, cassia, tamarinds, gums, incense, myrrh, aloes, spikenard, ostrich feathers, balm of Mecca, coloquintida, buffaloes', bulls', and cows' hides, and precious stones. The imports in return, are hard-ware, fire-arms, cutlery, gun-powder, and cloths, from England; wines, velvets, and other silks, from Sicily; almonds, nuts, cloth, paper, and money, from Marseilles; money, copper vessels, and furs, from Turkey; wines from Zante; and beads, paper, mirrors, cutlery, china ware, and money, from Italy. According to Niebuhr, about 1600 bales of broadcloth, 400 of pepper, 200 barrels of cochineal, and 60 of pewter, are sent yearly from Europe to Egypt. Egypt procures from the Red Sea the coffee, odors, gems, and drugs of Yemen, the perfumes of Arabia, the spices of Ceylon, the pearls of the Baharean isles, the muslins and linens of Bengal, and the shawls of Cashmir. The coffee alone is an annual object of 11 millions of livres. Every year a caravan leaves Morocco for Mecca, in Arabia. It passes along the Mediterranean shores, collecting pilgrims and merchants as it moves, and usually arrives at Cairo in May, bringing the gums of Morocco, and elephants' teeth, tamarinds, parrots, ostrich feathers, gold dust, and black slaves, from the other side of the Sahara. About 50,000 persons usually come in the caravan to Cairo, and the number of camels is still greater. They stay here upwards of a month. The city all this time presents the appearance of a fair, and the resort of strangers to it is immense. Here it is joined by the pilgrims, and merchants of Egypt, and usually doubles its numbers. It proceeds to Suez, where it is greatly increased by additions from Syria and Persia, and in its rout, on the eastern side of the Red Sea, from Hindostan. At Mecca it is found usually to contain 200,000 persons. The western part of it returns to Cairo in 100 days from the time it left there, loaded with the merchandise of Arabia and the east, collected at Mecca and at Suez. A part of this is left in Egypt; and the remainder, with cloths and clothing of every description, glass-ware, broad-swords, false pearls, coral, and amber, purchased at Cairo, are carried westward for the Barbary States, and for Timbuctoo.

Other caravans go from Cairo to Damascus, Sennaar, Abyssinia, and Fezzan.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE, FACE OF THE COUNTRY, SOIL AND AGRICULTURE, RIVERS, LAKES, BOTANY, ZOOLOGY, MINERALOGY, MINERAL WATERS.

Climate.] THE climate of Egypt is extremely hot, as we might infer from its latitude, commencing at the torrid zone, and extending 8° into the temperate. The heat of the day, in July and August is usually 86° or 88° of Fahrenheit, in the shade, and in the Said it is much higher. The small elevation of the land is also the reason why the heat of Egypt exceeds that of other countries in the same latitude. From March to November inclusive, the heat is hardly supportable to an European. The sky is then sparkling, the air inflamed, and nearly destitute of moisture, and during the three first months the weather is variable, and the season very unhealthy. In June, July, August, the autumn and winter, diseases are less prevalent, and the weather is more uniform. The heat of winter never exceeds 52° or 50° ; of course snow and hail are unknown. In the nights of the warm season, particularly in the spring, the dews are very copious, but rains all this time are unknown; and they occur very rarely in the winter. Rains are most frequent in the Delta, and the dews are there most copious. Both are brought on only by winds from the Mediterranean. The winds of Egypt have a singular degree of regularity. In June they blow from the N. and N. W.; in July between the N. W. and N. E.; thence to the equinox they are constantly N. and moderate, brisker by day than by night. At this period an universal calm remains on the Mediterranean. From the equinox, till December, they are chiefly from the N. and E. In the three winter months they become more violent and tempestuous, change frequently, and yet blow from the N. W. and W. In March and April they come from the S. E., S. and S. W.; and in May the east wind divides with the north the empire of the sea. The south winds are hot and parched; although, when they occur in winter, they are as cold as the north. The climate is generally healthy. The inhabitants are robust, and live many of them to old age. The dryness of the air prevents meat from putrifying, even in summer. Almost all the inhabitants drink of the Nile. Its waters, though turbid, are considered as highly salubrious, and as rendering the Egyptian women remarkably prolific. The plague does not originate in Egypt, but is brought there from abroad. Herniæ are not common. Cutaneous diseases are prevalent, and would be more so were it not for the daily use of the bath. The leprosy and elephantiasis are rare. Ophthalmia is almost universal; and the

number of the blind is very great. The ravages of the syphilis are dreadful. Malignant fevers sometimes become epidemic. The Egyptians are generally of a bilious habit, and the colic is the habitual malady.

Face of the Country.] The habitable part of Upper Egypt is a long narrow valley, commencing at Syene, and terminating a little south of Cairo. Two chains of mountains, taking their rise from the lower cataracts of the Nile, bound this valley on the east and west. The width of the valley is from 12 to 30 miles. At Cairo the chains separate to the right and left. The western, consisting of sandy hillocks over a bed of calcareous stone, winds to the N. W. and terminates in the sand banks near Alexandria. The other, Mount Mokattam, composed of high and steep rocks, turns to the E. and runs to the Red sea. Between these insurmountable barriers the Nile winds upwards of 6 degrees of latitude, with varied current, sometimes smooth and tranquil, at others impetuous, and overflowing the valley, which it fertilizes with its waters. Beyond the eastern range is the desert of the Red sea, of which the Egyptian part is 480 miles long, 200 wide in the south, and 70 in the north; a barren expanse, intersected by various ranges of hills, which abound in marble and porphyry, but are destitute of water and of vegetation, and are chiefly covered with sand. Across these hills runs the solitary road, which leads from Cosseir to Keft and Keneh, on the Nile. Beyond the western range stretches a vast desert of sand, which is the eastern skirt of the Sahara. This is also intersected by chains of barren hills, and roads from Girgeh and Siut lead to the two Oases, the greater and the less, which are considered as belonging to Egypt. Below Cairo the valley of the Nile widens, and embraces not only the Delta, but all the country watered by the canals connected with the eastern, or Pelusian branch of the Nile. The country N. E. of Suez, to the Mediterranean, is also chiefly a barren, sandy plain. The coast of Egypt, on the Mediterranean, is so low that it can be seen but a very short distance off at sea. The coast on the Red sea is rocky, and often elevated.

Soil and Agriculture.] The basis of Egypt from Syene to the Mediterranean, is a continued bed of calcareous stone, of a whitish hue, and somewhat soft, containing shells of echini, volutes, bivalves, and a species in the shape of lentils. The soil upon this bed in the valley of the Nile, and in and near the Delta, is a black fat loam, of a clayey cementing quality, and eminently productive. When left uncultivated, it is liable to be cracked by the intense heat of the sun, to the depth of several feet. The most fertile districts are the Delta, and the province of Faycium, between the Canopic branch and the canal of Alexandria. The harvest of rice on the Delta is very great. The value of 600,000 livres is exported from Damietta alone. Grain grows every where. The chief species being wheat, and barley for the horses. The wheat of Upper Egypt is the sustenance of Arabia, and is shipped at Cosseir. The Delta and the neighboring country are watered by the overflowing of the Nilc. Most of the water in Upper Egypt

is conveyed to the lands by machinery. Indian corn, flax, hemp, and tree sugar, are very extensively cultivated. Lentils form a considerable article of food in the Said. The Egyptian onions and leeks are remarkably mild, and most of the European vegetables grow in the gardens. Millet and Turkey corn, the vine, and the Egyptian privet; the carthamus, senna, colocynthida, and several other medicinal plants; and fence-greek and barsim, two species of fodder, are also extensively cultivated.

Rivers.] A minute description of the extent and course of the Nile has already been given. The water begins to rise about the 19th of June, and subsides in October. Before the 20th of August it usually has risen at least 16 cubits, the increase necessary to insure a favorable crop. This rise in the Nile is owing to the rains of Abyssinia.

Lakes.] The largest lake, Menzala, the ancient *Tanis*, lies east of the Pelusian arm of the Nile. It is 60 miles long, and 12 broad, and lies parallel with the Mediterranean, from which it is separated by a narrow strip of sand. Several canals connect it with the river, the waters of which discharge themselves copiously into the lake during the inundation, and render its water soft. In winter the reflux of the sea renders it brackish. There are several islands in the lake, built over like towns, as Nabli, Touna, Samnaa, and Hassan-Elma, which can only be approached by boats. Of these, about 1200 continually fish on the lake, and pay an annual tribute of £2160 sterling for the privilege.

Lake Berelos is in the Delta, between Damietta and Rosetta. It is 32 miles long and 10 broad, in the middle, but contracts at both ends. It also contains several islands. Lake Elko is a long narrow strip of water near Aboukir. Lake Kerun lies S. W. of Cairo, and is about 30 miles long and 6 broad. Though at a considerable distance from the Nile, it is in a fertile district, which shoots out like an excrescence westward. The Natron Lakes are in the desert, west of the Nile, about half way between Kerun and the sea. They produce natron, or the mineral alkali.

Botany.] Fruit trees abound in this country. The figs are of excellent flavor. The date-palm and the sycamore-fig, rises in every kind of soil, even in the sands. Its bark affords filaments, out of which are manufactured ropes and sails; baskets are made of its leaves, and javelins of its branches. The orange, the lemon, olive, and pomegranate, are abundant. A species of cyperus here produces a delicious fruit, resembling the earthnut, which yields a pectoral emollient juice. The banana-tree grows in Lower Egypt. The fruit of the custard apple-tree has a fine fragrance and flavor. The apricot, peach, almond, and pistachio-nut, are cultivated with success. The lotus, a species of water-lily, covers the canals and pools after the inundation. The papyrus is still found on the banks of the Nile. The oriental plane-tree, the caper-bush, the arum-colocasia, the cotton tree, sugar-cane, plantain, mallow, Jew's mallow, the esculent hibiscus, senna, mimosa nilotica, colocynthida, henne, carthamus, and helbe, ought also to be mentioned in the botany of Egypt. The aile, a large

species of tamarisk, is the only wood that is common for fuel, or manufactures.

Zoology.] The ox was anciently one of the *Dii majores* of Egypt; and then, the breed was excellent. Since that time the number of these animals has greatly decreased, and their quality has degenerated. They are now of a fawn color, their horns are small, and they are employed in tillage, and hydraulic machines. The buffalo was brought from Persia. The female is reared for its milk, and the male for its flesh, which is red, hard, and dry, and has a musky fragrance. There are numerous species, all domestic. The horses of Egypt are scarcely inferior to those of Arabia, in spirit, activity, or beauty. Their reputation has been high since the time of Solomon, who here supplied his 4000 stalls. The male horse is permitted to retain his perfect character. The Egyptian ass is rivalled only by the ass of Nubia and Arabia. Those of the Said particularly, are highly valued for their vigor and beauty. They are hardier than the horse, less difficult as to the quality and quantity of their food, and better fitted for traversing the desert. The mules are equally excellent. The Egyptian dogs are a race of large gray hounds, that never leave the quarter where they are born, and form distinct tribes. They throng the streets of all the cities, and the Bedouins have great numbers, which they defend with their lives. The cat was once sacred. They are now numerous, and are still treated with great attention and tenderness in every house. Sheep and goats are not found in great numbers. The tyger, jackal, antelope, deer, fox, and hare, are found in desert places. The Egyptian ape has a head like that of a dog, and is strong and ferocious. Crocodiles are very numerous on the banks of the Nile, between Syene and Siut. The ichneumon, one of the ancient deities, destroys the eggs of the crocodile, but is also very fond of poultry. This propensity has lost him the respect of the inhabitants, notwithstanding he is an excellent mouse and rat catcher. He is less common in the Said, than farther north. The *thirs*,^a a species of tortoise in the Nile, is the worst enemy of the crocodile; he kills and devours the young ones, as soon as they creep into the river. The number of rats and mice would render the country uninhabitable, were it not for the annual deluge. Cameleons are numerous about Cairo, and lizards and vipers in various places. Scorpions are very large in the Said, and also venomous. Wasps are there very common. The gnat has a dismal sting, and comes in swarms after the rice harvest. Swarms of winged insects float in the air, and furnish incessant employment for swallows and wag-tails. Great attention is paid to the culture of honey. The hives of several villages in Lower Egypt, are put on board large boats, and sent up the river to cull the earlier sweets of Vosthani and the Said. The boatmen stop at every place where they find flowers and verdure. The bees at day-break quit their cells by thousands, and soon return loaded with the spoils of the orange-flower, the rose and the jessamine, and the numberless wild flowers that adorn the valley of the Nile. The fleet usually returns in three months, and the

boatmen receive their recompense in the honey, which the bees have collected.

Mineralogy.] Immense quarries of marble are found near Cosseir, and in the road from that place to Keneh. Similar quarries extend more than 25 leagues from Monflut to Sawadi. It is also found in the mountains N. E. of Syene. A range of porphyry mountains commences on the coast of the Red sea, in lat. 24 N. at Hamra, and reaches to 22 30 in Nubia. On the road from Cairo to Suez are found great numbers of Egyptian pebbles. Copper is the only metal found here by the ancients. Quarries of red granite reach from the cataracts below Syene. N. W. of that town is a quarry of serpentine, of which the inhabitants make vessels which stand the fire. In the same parallel there was anciently a mine of emeralds, the traces of which are now lost.

Mineral Waters.] The situation of the Natron lakes has been mentioned. They are two in number, 3 or 4 leagues long, and about a mile broad, with a solid stony bottom. For 9 months they are without water. In the winter there oozes out of the earth a reddish violet colored water, which fills the lakes to the height of 5 or 6 feet. This is evaporated by the heat of the spring, and there remains a bed of salt 2 feet thick, which is broken with iron bars. Thirty thousand quintals are produced annually.

NUBIA.

THIS name has long been given to a tract of indefinite extent, lying between Egypt and Abyssinia. On the Nile it may be considered as commencing a little above Syene, immediately under the tropic; and in the same latitude on the Red sea. Its proper southern limit, on the Red sea, is the northern boundary of Abyssinia, in lat. 16. On the E. bank of the Nile, it reaches a little above the mouth of the *Rahad*, or *Dender*; and on the W. bank, as far S. as the cataracts in that river. It extends westward beyond the *Bahar El Abiad*, as far as the frontiers of *Dar Fur*.

The northern part of this country is an extensive desert, called the *Great Desert of Nubia*. This desert commences at the tropic. The mountains, which run parallel with the western shore of the Red sea, from Suez to Babelmandel, are its eastern limit. Westward it extends beyond the Nile, joining the desert of Libya; of which it is merely a continuation. On the S. it terminates at Goos, in lat. 18, just below the mouth of the Atbara. Bruce crossed this desert on his return from Abyssinia. From Goos he went nearly in a straight course to Syene. The country is here an immense expanse of sand; the level surface of which is here and there broken by sharp ridges of rock rising out of the plain, and

sometimes attaining a considerable elevation. The wild Arabs roam over it to attack the travellers, who cross it on the road to Syene ; and those who proceed from the interior of Africa in caravans, to Mecca. The only interesting objects remarked by Bruce, were the *moving pillars of sand*, and the *simoom*. The pillars of sand at times proceed with great celerity, and at times they stalk with majestic slowness. When Bruce was at the halting place, called *Assa nagga*, in lat. 19° 20', he saw eleven of them about 3 miles distant. They followed the course of the wind, and often with such rapidity, that the swiftest horse would in vain have attempted to escape them. The greatest diameter of the largest, appeared, at that distance, as if it would measure 10 feet. Their tops often seemed to reach to the clouds, and were frequently separated from the bodies. In this case they were immediately dispersed in the air. Sometimes they were suddenly broken near the middle, as if struck with a large cannon shot. Sometimes they pass between the traveller and the sun, and then assume the appearance of pillars of fire. The *simoom*, or poisonous blast from the desert, at a distance, has the appearance of a haze, in color, like the purple part of the rainbow, but less compressed and thick. The one, which Bruce describes, was not more than 20 yards in breadth, and about 12 feet from the ground. It was a kind of blush upon the air, and moved very rapidly. The only resource of the traveller is to fall flat upon the ground with his face to the earth. An inhalation of the fatal atmosphere, which it brings, is soon succeeded by death. After the purple meteor has vanished, a light air still blows, of a heat to threaten suffocation.

DONGOLA is a town on the E. bank of the Nile, in lat. 19° 30' N. and lon. 32° E. It is the capital of the kingdom of Dongola ; which lies on both sides of the Nile, and is considerably extensive. We have seen, however, no satisfactory account of it.

Of SENNAAR, the southern kingdom of Nubia, Bruce has given an interesting description. It may be considered as comprising the country between the Red sea and the Nile, as far S. as the N. W. limits of Abyssinia ; as reaching on the E. bank of the Nile, between it and the Atbara or Tacazze, to about lat. 13° ; as comprehending all the country between the Nile and the Bahar el Abiad, as far S. as the cataracts of the Nile ; and also as including the provinces of Shillook and Kordofan on the W. of the latter river. The kingdom of Darfur is its S. W. boundary. The tract between the Atbara and the Nile, is called *Atbara*. The province of Sennaar, includes the northern part of the country between the Bahar el Abiad and the Nile ; and that of *Fezcuclo*, the southern, as far as the cataracts. The province of *Shillook* lies W. of the Bahar el Abiad, in the latitude of Sennaar ; and that of *Kordofan*, lies S. of Shillook, and W. of *Fezcuclo*.

From the time of Saladin, to the conquest of Selim, emperor of the Turks, who finished the reign of the Mamelukes in Egypt, i. e. from the 12th to the 16th century, the Arabs in Nubia had been incorporated with the old indigenous inhabitants of the country, which were the shepherds. The only distinction that remained,

was, that the Arabs lived chiefly in tents, while the aborigines lived in villages, mostly by the sides of rivers, and among plantations of date trees. Those of the Arabs, however, who belonged to the race of *Beni Koreish*, i. e. Mahomet's own family, lived in towns. The Arabs, after a while, became the ruling nation, and the aborigines were connected to Mahometanism. The title of the Arab prince, was *Ali Welled Ageeb*, and he always was of the race of *Beni Koreish*. His residence was at *Gerri*, on the E. bank of the Nile, just below the junction of the two great branches of that river, and at the northern limit of the tropical rains, in lat. 16 N.

In the year 1504, a black nation, hitherto unknown, called the *Shillook* nation, inhabiting the western banks of the Bahar el Abiad, in about lat. 13 N. made a descent in a multitude of canoes or boats on the Arab provinces ; and in a battle near Herbagi, a town opposite the mouth of the *Dender*, defeated the Welled Ageeb, and forced him to a capitulation. The Arabs agreed to pay the negroes half of their stock, and every year half of the increase. The negroes founded Sennaar, as their own capital in 1504, and removed the seat of government of the Welled Ageeb, from Gerri to Herbagi, that he might be more under their own eye. Bruce was at Sennaar, in 1770. In the 266 years that had followed the foundation of the monarchy, 20 kings had reigned in Sennaar. Amrou, the first king, reigned from 1504 to 1534. Eight of the 20 had been deposed. Ismain the king, in 1770, was a man 34 years of age, and had reigned 3 years.

The *Shilooks* were pagans when they invaded the country. Soon after they were converted to Mohammedism ; when they took the name of *Funge*, or conquerors. It is a fundamental law of the monarchy, that the king may lawfully be put to death, when a council of the great officers decrees, that it is not for the advantage of the state that he should reign any longer. The king ascends the throne under an admission of the force of this law ; and there is always one officer of his own family, the *sid el coom*, or master of the household, to whom the death of the king is on such occasions, by law, entrusted. This officer has no vote in deposing him. The only weapon he may lawfully use for this purpose is a sword. The eldest son of the king succeeds by right, and, immediately afterwards, puts to death as many of his brothers as he can apprehend. A female cannot succeed to the throne. The crown, since 1504, has always been in the family of Amrou. The king is styled the *Mek* of Sennaar. The forces at Sennaar, around the capital, consists of about 14,000 *Nuba*, who fight naked, having no armor but a short javelin, and a round shield ; and about 1800 cavalry, all blacks, mounted on black horses, armed with coats of mail, and broad Slavonian swords. These last are remarkably brave, and well disciplined.

The revenue derived from the province of Kordofan consists chiefly of slaves procured from Dyre and Tegla. That of Fez-euclo is in gold ; as is that from Atbara and the country E. of the river of that name. The *Welled Ageeb* collects all the revenue from the Arabs. It amounts to a very large sum in gold, exceed-

ing that of all the other provinces. He pays it to the Mek. His own revenues from the Arabs are said to be six times as large.

The dress of Sennaar is very simple. It consists of a long shirt of blue Surat cloth, called *Marowty*, which covers them from the lower part of the neck to the feet. That of the women covers the neck also. The men have sometimes a sash about the middle. Both sexes go barefoot in the house. Their floors are covered with Persian carpets. In fair weather they wear sandals without, and sometimes a kind of wooden patten, ornamented with shells. Both sexes anoint themselves at least once a day with camel's grease, mixed with civet, and sleep in shirts similarly treated. Their beds are merely tanned bull's hides, much softened by this constant greasing. The principal diet of the poorer sort is millet, made into flour and bread. The rich make a pudding of millet, and also eat beef partly roasted and partly raw. Their horned cattle are remarkably fine; but the common meat sold in the market is camel's flesh.

Bruce was called upon by the Mek to administer to several of the sable bodies of his seraglio. He gives us the following account of his visit. "I was admitted into a large square apartment very ill lighted, in which were about fifty women, all perfectly black, without any covering but a very narrow piece of cotton rag about the waist. While I was musing whether or not these all might be queens, or whether there was any queen among them; one of them took me by the hand, and led me, rudely enough, into another apartment. This was much better lighted than the first. Upon a large bench, or sofa, covered with blue Surat cloth, sat three persons, clothed from the neck to the feet with blue cotton shirts.

"One of these, who I found was the favorite, was about 6 feet high, and corpulent beyond all proportion. She seemed to me, next to the elephant and rhinoceros, the largest living creature I had met with. Her features were perfectly like those of a negro; a ring of gold passed through her under lip, and weighed it down, till like a flap it covered her chin, and left her teeth bare, which were very small and fine. The inside of her lip she had made black with antimony. Her ears reached down to her shoulders, and had the appearance of wings; she had in each of them a large ring of gold, somewhat smaller than a man's little finger, and about 5 inches in diameter. She had a gold necklace, like what we used to call *esclavage*, of several rows one below another; to which were hung rows of sequins pierced. She had on her ankles two manacles of gold, larger than any I had ever seen upon the feet of felons; with which I could not conceive it was possible for her to walk, but I afterwards found that they were hollow. The others were dressed much in the same manner. Upon my coming near them the eldest put her hand to her mouth, and kissed it; saying at the same time, in very vulgar Arabic, "*kif-halek howaja?*" (how do you do, merchant?) I never in my life was more pleased with distant salutations than at this time. I answered "Peace be among you! I am a physician, and not a merchant."

" I shall not entertain the reader with the multitude of their complaints ; being a lady's physician, discretion and silence are my first duties. It is sufficient to say, that there was not one part of their whole bodies, inside or outside, in which some of them had not ailments. The three queens insisted upon being blooded, which I complied with, as it was an operation that required short attendance ; but upon producing the lancets, their hearts failed them. I sent my servant home for the cupping instrument, which performed the operation with great success. The room was overflowed with royal blood, and the whole ended with their insisting that I should give them the instrument itself ; which I was obliged to do, after cupping two of their slaves before them, who had no complaints, merely to show them how the operation was performed.

" Another night I was obliged to attend them, and gave the queens, and two or three of the great ladies, vomits. The ipecacuanha had great effect, and warm water was drank very copiously. The patients were numerous, and the floor of the room received all the evacuations. It was prodigiously hot, and the horrid black figures, moaning and groaning with sickness all around me, gave me, I think, some slight idea of the punishment in the world below. My mortifications did not stop here. I have observed, that, on coming into their presence, the queens were all covered with cotton shirts ; but no sooner did their complaints make part of our conversation, than, to my utmost surprise, each of them in her turn stript herself entirely naked, laying her cotton shirt loosely on her lap, as she sat cross-legged, like a tailor. The custom of going naked in these warm countries abolishes all her delicacy concerning it. I could not but observe that the breasts of each of them reached the length of their knees.

" This exceeding confidence on their part, they thought merited some consideration on mine ; and it was not without great astonishment that I heard the queen desire to see me in the like dishabille in which she had spontaneously put herself. The whole court of female attendants flocked to see the spectacle. Refusal or resistance were in vain. I was surrounded by fifty or sixty women, all equal in stature and strength to myself. The whole of my clothing was like theirs, a long loose shirt of blue Surat cotton cloth, reaching from the neck to the feet. The only terms I could possibly make for myself were that I should strip no farther than the shoulders and breast. Upon seeing the whiteness of my skin they gave all a loud cry in token of dislike ; and shuddered, seeming to think it rather the effects of disease, than natural. I think I never in my life felt so disagreeably. I have been in more than one battle, but surely I would joyfully have taken my chance again in any one of them to have been freed from that examination. I could not help likewise reflecting, that if the king had come in during this exhibition, the consequence would either have been impaling, or stripping off that skin they were so curious about ; though I can solemnly declare there was not an idea in my breast, since ever I had the honor of seeing these royal beau-

ties, that could have given his majesty of Sennaar the smallest reason for jealousy."

The Arabs, like the Creoles of the West Indies, prefer the black women to their own in summer, on account of the superior coolness of their skins. It is remarkable, that the issue of an Arab and negro has uniformly the light copper complexion of the Arab, with no mixture of the black ; and it makes no difference whether the Arab be the father or the mother. Bruce says he never saw one black Arab in Sennaar, notwithstanding the generality of this intercourse.

The town of Sennaar is in lat. 13° 34' 36", N. and in lon. 33° 30' 30", E. It is built on the west side of the Nile, close to its bank, on ground just high enough to save it from inundations. The site of the town is extensive. The king's palace covers a great deal of ground. It is all of one story, built of clay, and the floors of earth. The houses of the great officers are of two stories, and have parapet roofs. The other houses are of but one, and they are all built of clay, with very little straw mixed with it.

El-Aice, or *Alleis*, is the capital of the Shillook country. It is on the Bahar el Abiad, in about lat. 13° 30', N. The river dividing forms a great number of islands. On these and the neighboring banks the town is situated. The inhabitants are chiefly fishermen, and sail in their canoes with incredible rapidity.

Herbagi is the residence of the *Welled Ageeb*. It stands on the W. bank of the Nile, in lat. 14° 39', N. It is a large and pleasant village, but thinly inhabited, on a dry, gravelly soil. The *Welled Ageeb*, the hereditary prince of the Arabs, is subject to the king of Sennaar and his lieutenant, according to treaty. He collects a tribute from all the Arabs, not only of *Atbara*, but even to the Red sea. The tribes living east of the Nile and of the *Atbara*, subject to him, are numerous, rich, and powerful.

Suakem is a port on the Red sea. It is the place of rendezvous for the caravans, which cross the desert on their way to Jidda.

Formerly Indian goods were brought in large quantities from Jidda to Sennaar ; and the articles returned were gold, civet, rhinoceros' horns, ivory, ostrich feathers, slaves, and glass. A caravan also once came from Timbuctoo. At present a small caravan goes yearly from Goos to Suakem, and the Daveina Arabs carry the ivory to Abyssinia.

The climate of this country is neither pleasant nor healthy. The seasons are the same as in Abyssinia. At Sennaar, from 70° to 78° of Fahrenheit, is cool ; from 79° to 92° temperate. The mercury often rises to 120°. The diseases are the dysentery, intermittent fevers, epilepsies, schirrous livers, the gravel, and syphilis. The small pox desolates once in 12 or 15 years. The soil and climate of the capital are very unfavorable to longevity, both in man and beast. "No horse, mule, ass, or any beast of burden, will breed, or even live at Sennaar, or many miles around it. Poultry does not live there. Neither dog nor cat, sheep nor bullock, can be preserved a season. Neither rose nor any species of jessamine grow there ; no tree but the lemon flowers near the city."

In the latter part of the dry season this whole country appears a barren waste. But in August and September it is every where verdant. The corn now springing up and covering the ground, the whole of this immense plain appears a level green land, interspersed with great lakes of water, and ornamented, at certain intervals, with groups of villages, the conical tops of the houses presenting, at a distance, the appearance of small encampments. Soon after, the rains cease; the vegetable matter on the ground turns yellow, and rots; the lakes putrefy, smell, and are filled with vermin. Dora or millet is the common grain. Wheat and rice are cultivated; but even in years of plenty they are sold by the pound. The produce of millet is said to be 300 for 1. At *Shaddly*, a collection of villages 12 miles N. W. of Sennaar, subterranean granaries are erected, called *mattamores*. Large quantities of millet are deposited here to sell to the Arabs, at a low price, in seasons of scarcity. At *Wed Aboud*, 24 miles N. of Shaddly, is a still larger foundation of the same kind. On these two charities they chiefly depend for subsistence.

To the W. of Shaddly and Aboud, the country is full of trees, which makes it a favorite station for camels. The Arabs have immense numbers of these animals. The tribe of Refaa, in 1770, had about 200,000. The tribute of that tribe to the *Mek* was 100,000 ounces of gold, or £250,000 sterling. There were then 10 such tribes, which owned this species of subjection.

ABYSSINIA.

CHAPTER I.

HISTORICAL GEOGRAPHY.

EXTENT, BOUNDARIES, DIVISIONS, NAMES, RELIGION, GOVERNMENT, POPULATION, ARMY, REVENUE, MANNERS AND CUSTOMS, CITIES, COMMERCE.

Extent.] THE country known by this name may be considered as reaching from lat. 7 to 16 N. and from lon. 35 to 44 E. Its length from E. to W. is about 580 miles, and its greatest breadth from Masuah, to the S. line, according to the map of Bruce, is about 560. It reaches, on the Red sea, from Masuah to the straits of Babelmandel, 420 miles. The northern boundary proceeds from Masuah, on a course nearly W. S. W. to the Nile. The Mediterranean limits are, however, very badly defined.

Boundaries.] The Red sea lies on the N. E.; the kingdom of Adel, on the E. and S. E.; Gingiso and Alaba on the S.; the Nile

on the W. ; Sennaar on the N. W. ; and the country of the *Jahaleen*, or wild Arabs, and of the *Shankala*, or descendants of the ancient Ethiopians on the N.

The *Gallas*, a wild and marauding nation, have encroached on the limits of Abyssinia, and now occupy various provinces on the S. W., S. and S. E.

Divisions.] This country, according to Mr. Bruce, is divided into the following provinces, viz.

1. Massuah	5. Amhara	9. Maisha
2. Tigre	6. Walaka	10. Dembea
3. Samen	7. Gojam	11. Kuara
4. Begemder	8. Damot	12. Nara

Names.] Bruce tells us, that the *Chronicle of Axum*, the most ancient Abyssinian history, declares that the *Sheba*, or *Saba* of the scriptures, whose queen visited Solomon, was Abyssinia. *Sheba* merely means the *South*. The Arabs call the country *Habesch*, the origin of our *Abyssinia*, and denoting the same with the Latin word *Convenæ*, i. e. a country of *mingled tribes or nations*.

Religion.] The Jewish religion is said, by Bruce, to have been prevalent in Abyssinia, till near the middle of the 4th century. *Frumentius*, a disciple of St. Athanasius at Alexandria, and the first Christian bishop of Abyssinia, was ordained about A. D. 333. This was about the time of their conversion ; and the primitive faith of the Abyssinians having been received through this channel, must have accorded with the peculiar tenets of the Greek church. The first attempt to spread the Romish faith was made about the year 1450, in the reign of Zara Jacob. That prince obtained from the pope the establishment of a convent for the Abyssinians at Rome. A similar one had long before been established at Jerusalem. From this latter ambassadors were sent to the celebrated council of Florence, who adhered to the opinion of the Greek church, about the *proceeding* of the Holy Ghost. About the year 1560, Menas banished the Portuguese monks, and the Catholic faith was wholly discountenanced, till 1600 ; when Peter Paez, a missionary from Goa, arrived in Abyssinia. In 1604, Za Denghel the reigning monarch was converted to the Catholic faith, and Paez was created Catholic patriarch. In 1626, Soci-nias, the existing king, with his court, abjured the Greek religion, and took oaths of obedience to the pope. The clergy were reordained ; their churches consecrated anew ; adults and children rebaptized ; the festivals reduced to the forms and times of the church of Rome ; and circumcision, polygamy, and divorce, abrogated forever. In consequence of the violent measures of Paez, subsequent to this change, the Catholics became unpopular, and in 1632 their hierarchy was abolished. They were allowed however to remain in the country, till 1714, when their clergy were executed. Since that time there have been few or no Catholics in the country.

The patriarch of the Abyssinian church, is styled the *Abuna*. By

an ancient canon, he must not be a native of the country, and is always sent from Egypt. He very seldom understands the language, and has no share in the government. There are two orders of monks, those of *Debra Libanos*, and those of *Abba Eustathius*. They differ merely about the meaning of a few equivocal words, used to define the mode and moment of our Saviour's incarnation : but this is sufficient to make them enemies all their lives. Every new Abuna publicly declares, in an assembly of the clergy, to which party he belongs. The king does the same. The head of the monks of Debra Libanos, is called the *Itchegue*; and he is really the chief of the monks in general. The head of those of St. Eustatius, is the chief of the convent of *Maherbar Selasse*, in the N. W. corner of Abyssinia. The monks do not live in convents, but in separate houses round their church ; and each cultivates a part of the church lands. The priests have their maintenance assigned to them in kind, and do not labor. The direction and distribution of the church revenues, is wholly in the hands of officers, appointed by the king. All the clergy are deplorably ignorant, heretical in their tenets, and licentious in their lives. There is no country in the world, in which there are so many churches as in Abyssinia. It is seldom that less than 5 or 6 are in sight, in any part of the country ; and, on a commanding ground, one may see five times as many. They are usually planted near running water, for the purposes of purifications and ablutions, in which they strictly observe the Levitical law. They are all round, with thatched roofs ; and their summits are perfect cones. The inside is covered with wretched daubings of their various saints. Among these, are St. Pontius Pilate, and his wife ; St. Balaam and his ass.

Government.] The government is an absolute monarchy. The crown is hereditary in one particular family, supposed by the Abyssinians to be that of Solomon, by the queen of Sheba ; but probably that of *Hamyar*, or *Saba*, in Yemen or Arabia Felix. In this family however, it is elective ; and there is no law, nor custom, which gives the eldest son an exclusive title. The royal family were formerly imprisoned in the high mountain of *Geshen*, in the province of Amhara. On the death of the king, if any one of his sons, of sufficient age to take the crown, happened to be in the low country, he was commonly his successor. If not, the existing minister usually chose an infant, that he might direct the whole government during a long minority ; and his choice was called the choice of the people. Seven noblemen, the chief of whom is the *Azeleffa el Camisha*, or groom of the stole, constitute the *Baalomaal*, or gentlemen of the bedchamber. The royal council is composed of the great officers of state. When Bruce left the country, the power of the king was insignificant ; the *Ras*, or governor of Tigré, having almost the whole direction of the government. The different capital punishments, are crucifixion, flaying alive, lapidation, and plucking out the eyes.

Population.] We have no data on which to form a correct judgment of the population of this country. It has been estimated at 3,000,000. Hassel reckons only 1,800,000.

Army.] Bruce says, that the largest armies ever collected in the country, were at the battle of Serbraxos. The rebels had then 60,000 men, and the king 40,000. The usual amount of the army does not exceed 20,000. Hassel, however, reckons the number at 40,000. The cavalry is good. The king's household troops consist of 8000 infantry. They are armed with matchlocks. Most of the other troops have only lances and shields.

Revenue.] The royal revenue is paid partly in ounces of gold; and partly in honey, cattle, horses, cloths, and various other articles.

Manners and Customs.] The principal part of the dress of the natives is a large cotton cloth, 24 cubits long, and $1\frac{1}{2}$ broad, with a blue and yellow stripe round the bottom. They are called *kuaras*, and are very beautiful and light. The other pieces of dress are breeches, which reach to the mid-thighs. Those of the common people are girt with a white cloth girdle; while the better sort wear red Indian cotton cloths for breeches, and silk or wos-ted colored girdles. When they ride they hold the stirrup between the great and second toes. Even the king rides bare-footed. Almost all the houses are built of clay, with thatched conical roofs. The chief articles of food are cakes of unleavened bread, and raw flesh, which as far as possible they cut from the animal while living, that it may be the more tender. At their feasts an equal number of both sexes are invited, and they always terminate in drunkenness and extemporaneous debauchery. The ordinary marriage is contracted by mutual consent without any ceremony, and is dissolved by the dissent of either party. As soon as this takes place, both parties marry again. They also divide the children, the eldest son falling to the mother and the eldest daughter to the father. Marriages, according to the church, are celebrated as follows. The man sends some one to ask the girl of her father, and is rarely refused. He is then invited to the house, and an oath is reciprocally taken by both parties to be faithful to each other. He then receives her fortune, usually a sum of gold, and some oxen, sheep, or horses. He is at the same time obliged to find security for the goods, in case he should dismiss his wife, and be unable to refund them; and also to promise a certain sum of money, should he abandon her. On the day of marriage a feast is prepared at the house of the bride's father; the oaths are renewed, and she is taken to the bridegroom's: In 20 or 30 days they appear before the priest to receive the sacrament, and acknowledge each other to be man and wife. No distinction is made in Abyssinia between legitimate and illegitimate children. Nothing is known of personal purity among any of the inhabitants. From the family of the king to that of the beggar the same licentiousness and profligacy are prevalent. When an Abyssinian approaches into the presence of the monarch, he falls upon his knees, then on the palms of his hands, and then inclines his head till the forehead touches the earth; and, in case he has an answer to expect, remains in that posture, till he has received it. The country has for many years been the scene of civil wars, which have called into exercise all the ferocious passions, and exhibited a constant succession of treachery, murder, and assassination.

Cities.] GONDAR, the capital, is in lat. 12 34 30, N. and in lon. 37 33, E. It is situated on a hill of considerable height, which is every where surrounded by a deep valley. This valley has three outlets ; one to the S. E. to Dembea ; a second to the N. W. over *Debra Tzai*, or the mountain of the Sun, towards Sennaar ; a third to the N. towards Tigre and the Red sea, over the high mountain *Lamalman*. The river *Kaha*, coming from *Debra Tsai*, flows N. of the town, and the *Angrab* skirts the hill on the S. They together almost encircle the town, and unite a quarter of a mile from it, at the foot of the hill. The top of the hill is a plain of very considerable extent. The length of the town is 3 miles from E. N. E. to W. S. W. and its breadth 1 mile. It contains about 10,000 houses, and about 50,000 inhabitants. Immediately on the bank, opposite Gondar, is a large Mahometan village, of about 1000 houses. The royal palace is at the W. end of the town, in the middle of a square court, which is a mile in circumference. Originally it was a square building, erected by masons from India, flanked with square towers, 4 stories in height, and built of stone. As this gradually decayed for want of repairs, different princes added small houses of one story in different parts of the court. These are composed of wood and clay, thatched with straw. The two lower stories of the original palace still remain. The audience chamber is 120 feet long. A substantial double stone wall surrounds the square. It is 30 feet high. There are battlements on the outer wall, and a parapet roof between the outer and inner. The town contains numerous churches.

AXUM, the ancient capital, is in lat. 14 6 36, N. and lon. 38 40, E. It stands in a plain, 140 miles N. E. from Gondar, and 120 from the Red sea. It is now a mere heap of ruins. In one square, apparently near the centre, there are 40 obelisks. They are each a single piece of granite. Two magnificent flights of steps, each several hundred feet long, are the only remains of a superb temple. It is watered by a small perennial stream, which still flows into a magnificent basin, 150 feet square. The present town, at a little distance from the ruins, contains about 600 houses.

SIRE is larger than modern Axum. It is in lat. 14 4 35, N. and in lon. 38, E. Its form is that of a half moon, and the town is famous for the manufacture of coarse cottons.

MASUAH is on a small island, which is only three quarters of a mile long, and of half that width. Not more than a third of its surface is covered with houses. The island is in the large bay of Masuah, in lat. 15 35 5, N. and lon. 39 36 30, E. About 20 of the houses are of stone, 6 or 8 of which are of two stories. The other houses are composed of poles and bent grass.

ARKEEKO is on the bay of Masuah. There is water enough for large vessels close to the town ; but the bay being open to the N. E. makes it uneasy riding in blowing weather. The town contains about 400 houses, built principally of coarse grass, like reeds.

Commerce.] Before the discovery of the Cape of Good Hope, the commerce of this country was valuable. It was carried on chiefly with Arabia and India, and Masuah was a harbor of great

resort. Gold, ivory, elephants, and buffaloes' hides, were the chief exports ; and they are now exported to some extent. Slaves also are exported to India and Arabia. The imports from Arabia are blue cotton, Surat cloths, cotton in bales, Venetian beads, drinking and looking-glasses, and crude antimony. A small caravan goes yearly to Cairo, laden with gold dust.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE, FACE OF THE COUNTRY, RIVERS, LAKE, MOUNTAINS.

Climate.] THE rainy season commences in April, and ends about the 8th of September. An unpleasant sickly season follows, till about the 20th of October, when the rains recommence. They then continue constant, but moderate, till about the 8th of November. All epidemic diseases cease with the latter rains. The heat depends on the elevation of the ground. Bruce kept a register of the weather at Gondar upwards of a year and three months. The greatest elevation of the mercury was 91° , in April, the least, 54° , in July. The hills are generally healthy, and great numbers of the towns and villages are built on them. The more prevalent diseases are violent fevers, which prove fatal on the 5th day ; the tertian fever ; the dysentery ; the *hanzea*, a species of king's evil ; the *farenteit*, or worm of Pharaoh ; and the elephantiasis.

Face of the Country.] The surface in the middle and S. is generally rugged and mountainous, and abounds with forests and morasses. It is also interspersed with many fertile valleys and plains. In the N. it is chiefly a flat country.

Soil and Agriculture.] The soil, though often thinly spread, is rendered extremely productive by the rains, and the overflowing of the rivers. Wherever it can be tilled and well watered, it yields abundant crops. The inhabitants first sow a crop of barley about the last of April. It ripens in the rains in June, and is carried from the fields to prevent its rotting. They then sow fitches, which ripen in August. In September they sow wheat or *teff*, which is cut down in December. Those who have water, sow barley or fitches again in January. At a medium a harvest is only about 20 for 1. They never manure the ground, and the rats and ants constantly devour the crop. All their harvests are not equal to one in Egypt.

Rivers.] The eastern branch of the Nile, called the *Bahar El Aerek*, rises in Abyssinia, and is for some distance its eastern boundary. It has heretofore been minutely described.

The *Atbara*, heretofore called the Siris, the *Astaboras*, and the *Tacazze*, has three sources, the most remote of which rises near the village of Gourie in the province of Angot, 250 miles E. S. E.

of Gondar. It pursues a N. W. course of about 800 miles, joining the Nile, in lat. 17° 50' N. The northern *Angrab*, which rises near Gondar, falls into the Atbara on the W. and still lower down the *Guangue*. The *Mareb* is a stream which rises in the mountains, on the borders of the Red sea; and, passing about midway between Arkecko and Axum, runs N. W. to join the Atbara in the desert of Sennaar.

The *Rahad*, or *Dender*, is a considerable river, that joins the Nile from the E. 40 miles below Sennaar.

Lake.] The lake of Tzana, or Dembea, lies 24 miles S. S. W. of Gondar. It is 49 miles in length, from N. to S. and 35 in breadth. It contains 10 or 12 islands, some of considerable size. The *Bahar el Asrek* passes through it.

Mountains.] A chain of mountains runs along the whole coast of the Red sea, from Suez to Babelmandel. In lat. 13°, a chain leaves it to the S. W. and W. which crosses the Nile at its cataracts, and unites with the mountains of *Tugula*. Still farther S. a chain seems to separate from it in the same direction, and passing S. of the Nile, to join the mountains of the Moon.

EASTERN COAST OF AFRICA.

THE coast, from Cape Gardefan, to the equator, is called, *Ajan*, the *Azania* of Ptolemy, and includes the kingdoms of *Adel*, and *Magadaxo*.

ADEL. Adel lies S. E. of Abyssinia, has the country of the Gallas on the W. and Magadaxo on the S. We do not know its exact limits. It commences, on the N. W. at the Straits of Babelmandel. It revolted from Abyssinia about the year 1320; and, after having since been repeatedly subjugated by that country, is now independent. The inhabitants are Mahometans. The king is absolute. Heretofore he has been tributary to the Grand Seignior, and has been assisted by troops from Arabia, against the Abyssinians. The country is populous, and has proved too powerful for its enemy. Several of the provinces of Abyssinia are now subject to Adel. The inhabitants are tawney, and have long, straight hair. *Zeila*, its principal seaport, is about 50 miles S. of the Straits of Babelmandel, at the head of the Gulf of Zeila. *Adel*, the royal residence, is in lat. 8° 5', N. lon. 44° 20', E. on the Hawash. *Assem* is a seaport on the eastern coast, and *Meta* on the northern. The country, though it seldom has any rain, is so well watered by rivers and canals, that it is very fertile and productive. It yields abundance of wheat, barley, and millet. The chief exports are gold dust, frankincense, ivory, and slaves. The Arabs come to Zeila to trade with the Adelites. The dress of the inhabitants consists of a piece of cotton, which covers them from

the girdle to the knee. The Arabs call them the *Gibbertis*, or *faithful*.

MAGADOXO. This kingdom is said to extend on the coast from about lat. 5, N. to the mouth of the Jubboo, which empties under the equator. It bounds N. on Adel, and S. on Melinda. Its limits in the interior are not ascertained. The inhabitants, of whatever extract, (for some of them are white, others tawney, others olive, and others quite black,) speak Arabic. They are stout, and warlike ; and, among other weapons, use poisoned arrows and lances. The king and his court are Mahometans, and most of the inhabitants are of the same religion. A few in the interior are Abyssinian christians. Magadoxo, the capital, in about lat. 2 30, N. is a place of great commerce with the Arabs, and the people of Adel. Gold, ivory, wax, and slaves, are exported for cotton, silk, spices, and drugs. The city stands at the mouth of a very large river, called by the Arabs *The Nile of Magadoxo*. It is said to rise in the *mountains of the Moon*. The country is less fertile than Adel, particularly on the coast.

The coast south of the equator, as far as about lat. 24, is called *The Coast of Zanguebar* ; which is said to import the *coast of the negroes*. It comprehends a number of kingdoms.

MELINDA. This kingdom bounds N. on Magadoxo, reaching to the equator. The inhabitants are chiefly Mahometans, but some are idolaters. The king is absolute, and is held in great veneration by his subjects. He is to a degree dependent on Portugal. The proper aborigines are negroes, but great numbers of Arabs are found here. The men wear the Mahometan turban. Their other dress is a piece of cotton, reaching from the girdle to the knees. Melinda, the capital, is in lat. 2 50, S. The Abyssinians call it *Tarshish*. It is in a beautiful plain, on the coast, surrounded by fine gardens and orchards. The houses are built of square stone. They are for the most part handsome, and some are even magnificent. It is the habitation of many wealthy merchants, Arabs, and Portuguese. The exports are gold, copper, ivory, wax, and drugs. The harbor is difficult of access, because of the rocks and shelves. On this account vessels are obliged to anchor at a distance from the town. The Portuguese have a fortress here, and several churches. The territory is generally rich and fertile. The necessities of life are abundant, and the fine tropical fruits are found in high perfection.

MOMBAZA. This is the next country S. of Melinda. The Portuguese early subjugated it, but were driven out by an Arabian Sheikh, in 1631. They reconquered it in 1729 ; and, we believe, have now the sole government. The people are more civilized than any others on the coast. The aboriginal blacks are partly idolaters, and partly Mahometans. The Arabs are Mahometans, and are numerous. The Portuguese are also numerous, and are Christians. Mombazo, the capital, is in lat. 3 45, S. It has a deep and commodious harbor, and is well defended. The streets are straight and narrow. The houses are built of stone, with terraced roofs. Its commerce is extensive. The climate is said to be

healthy, and the soil is highly productive. Millet and rice are principally cultivated.

QUILOA. The Portuguese possess Quiloa, a country lying S. of Mombazo, and extending about 60 leagues from N. to S. Most of the inhabitants are Mahometans. The king is absolute over his own subjects, but tributary to the Portuguese. The Arabic is universally spoken. The inhabitants are chiefly negroes, but some are Arabs. The city of Quiloa is in lat. 8° 50', S. It stands on an island, near the mouth of the Coaro, and is said to be large, rich, and well built. The houses are of stone, several stories high, and have large gardens behind them. The climate is healthy, and on the coast, temperate. The soil is generally fertile, and produces millet, rice, fruits, and good pasture.

MOSAMBIQUE. South of Quiloa lies Mosambique. It is of very considerable extent along the coast, reaching from about lat. 10 to 15, S. Vasco de Gama landed at the capital in 1492. At that time the country was subject to the king of Quiloa. We know not when it became independent of that monarch. The inhabitants are chiefly black, and the Arabs are not numerous. Arabic, however, is extensively spoken. The Portuguese have long been the real masters of the kingdom. The capital is situated on the small island of *Mosambique*, 2 miles from the main, in about lat. 14, S. It is handsomely built, has a number of elegant churches and convents, and is protected and kept in subjection, by a very strong fort, at a little distance. There are several considerable ports on the main. Ivory, ebony, slaves, and cattle, are exported. The soil of the island is a white, barren sand. That of the country is rich, and produces millet, rice, and various fruits and vegetables. Vast numbers of cattle are here raised. The forests abound with elephants, wild boars, and stags.

MONOMOTAPA. This is also an extensive country, reaching from about lat. 15 to 20 S. and stretching 420 miles along the coast. About two centuries ago, the whole of the *coast of Zanguebar*, S. of Mosambique, was subject, or tributary to the emperor of Monomotapa; but the country S. of lat. 20 was divided into several tributary kingdoms. Whether these are now dependant or not, we cannot learn. The emperor, however, is still powerful. The influence of the Portuguese is considerable. The natives are all black. They are well shaped, robust, active, and fond of war. Their dress consists of a single piece of cloth, depending from the girdle. That of the common people is of dyed cotton, that of the rich, of India silk. Polygamy, to any extent, is allowed. The emperors, in this particular, often rival the Jewish monarch. The metropolis is called *Bonemetaha*, and is a large spacious city, several days journey from the coast. The houses are neat, and are generally whitewashed. The palace is a very large edifice, well flanked with towers, with four gates, defended by a numerous guard. The Portuguese are settled on the coast, and are the merchants of the country. Gold and ivory are extensively exported. The climate is described as healthy, and temperate, and the surface as chiefly upland. There is a chain of

756 COLONY OF THE CAPE OF GOOD HOPE.

high mountains in the interior, called *Lufiata*, from which most of the gold is procured. The *Zambeze*, or *Cuama*, is a long river in the southern part of Monomotapa Proper.

SOFALA. This country, bounding Monomotapa on the S. is described as reaching about 140 miles along the coast, and 350 into the interior. We know not whether the king is a tributary of the emperor of Monomotapa. A considerable number of the inhabitants are Mahometans. The capital, *Sofala*, is at the mouth of a large river of the same name, in about lat. 21 S. Bruce supposes that it was the *Ophir* of Solomon. The Portuguese have here a strong fort. The natives are black, with curly hair. Their dress is the same with that of the Monomotapans. Large quantities of gold are procured from the mountains.

SABIA, OR SEDANDA, is a country of small extent, S. of Sofala, rich, fertile, and populous.

INHAMBARNE lies S. of Sabia. With this terminates the Zanguebar coast.

DE LA GOA. The bay of De La Goa, lies in lat. 26 S. and lon. 32 E.; is often visited by the southern whalers, and is of considerable extent. The Manica and Mafumo, are two large rivers which fall into it. Mr. White* informs us, that a king named Capellah, rules the country S. of the Mafumo, 100 miles along the coast, and 200 into the interior; and that he has 14 chiefs tributary to him. The inhabitants are Pagans, of a bright black color. They are tall and stout, and go nearly naked. The dry season lasts from April to October. The soil is a rich black mould. Rice, maize, millet, and the sugar cane are cultivated. Cattle and poultry are very cheap. The wild beasts, are the tiger, rhinoceros, wild boar, antelope, hare, and rabbit.

NATAL is the name given to the whole coast S. of the coast of Zanguebar, as far as the colony of the Cape.

The *Caffers*, or *Koussis*, are a numerous race, inhabiting on the borders of the Cape colony. The eastern part of that colony was also formerly in their possession.

COLONY OF THE CAPE OF GOOD HOPE.

CHAPTER I.

HISTORICAL GEOGRAPHY.

EXTENT, BOUNDARIES, DIVISIONS, NAMES, HISTORY, RELIGION, MISSIONS, GOVERNMENT, POPULATION, REVENUE, MANNERS AND CUSTOMS, TOWNS, TRAVELLING, COMMERCE.

Extent.] ACCORDING to Barrow, whose judicious work will be made the basis of our remarks on this important colony, its eastern limit is the mouth of Great Fish river, in lon.

* Voyage to Madras, 1800, 4to.

28 20 E. Its northern, on the Atlantic, is the mouth of the *Koussie*, in lat. 29 55 S. Cape L'Aguillas, the southern extremity of the continent, is in lat. 34 50 S. The length on the S. coast, from Cape Point to Great Fish river, is 580 miles ; on the N. from the river Koussie, to Zuureberg, 520. The breadth in the W. from the Koussie to Cape Point, is 315 ; in the middle from Nieuweldt mountains, to Plettenberg's bay, 160 ; in the E. from the mouth of Tush river, to Plettenberg's Baaken, 225. These measures give a parallelogram, whose mean length is 550 miles, and mean breadth 233 ; comprehending an area of 128,150 square miles.

Boundaries.] On the N. lie several extensive arid plains, and several large tracts of country inhabited by the *Bosjesmen* ; on the E. the land of the *Caffres* ; on the S. the Southern ocean ; and on the W. the Atlantic. The *Namaquas*, on the N. W. are chiefly within the colony ; as are some of the *Caffres*, and many of the *Bosjesmen*.

Divisions.] The colony is divided into four districts ; 1. *Cape district* in the S. W. which reaches on the Atlantic ocean to Helena bay, about 120 miles ; and, on the southern, only to the middle of False bay : 2. *Stellenborch district* in the W. which reaches from the Koussie to Helena bay, on the Atlantic ; and from the middle of False bay to the mouth of Breede river, on the southern ; while, in the interior, it stretches eastward to Lyon's river, as far as lon. 23 E. : 3. *Zwellendam district*, which reaches from Breede river to Great river, that falls into Camtoos bay, on the coast, and no where extends far into the interior : 4. *Graast Reynet district*, which comprises all the country E. of Lyon's river, and N. E. of Zwellendam.

Names.] Bartholomew Diaz first discovered the Cape, which gives name to the colony. He called it *Cabo dos Tormentos*, or the *Cape of Storms* ; but his master, John II. king of Portugal, gave it a name of better omen, the *Cape of Good Hope*.

History.] Diaz discovered the Cape in 1487, but went no farther. Vasco de Gama, also a Portuguese, reached the Cape on the 20th of November, 1497, on his way to Calicut ; and was the first voyager, that ever coasted the southern shore of Africa ; unless we admit, that Sesostris circumnavigated that continent. The Portuguese, soon after, planted a settlement at the mouth of Great Fish river, then called by them *Rio d'Infante*, after the admiral, who projected the settlement, on the eastern frontier of the present English colony. This place they abandoned for want of shelter for their shipping, which they found farther E. in the bay of *DE LA GOA*. After this the English, Dutch, and Portuguese, made use of the cape merely as a watering place, till 1620 ; when the commanders of two English fleets, bound for Surat and Bantam took formal possession in the name of James I. ; but the English did nothing towards planting a colony. In 1650 the Dutch East India company, in consequence of the favorable representations of Van Riebeck, a surgeon of an India ship, sent to the cape a colony of 100 males ; and soon after as many females from the houses of industry in Holland. The company laid the colony un-

der such severe restrictions, that it never flourished. The English, under Sir James Craig, in September 1795, took possession of the cape in the name of the prince of Orange. They restored it to Holland, at the peace of Amiens, in March 1802. An English squadron, under Sir Home Popham, anchored in Saldanha bay, on the 6th of January, 1806. On that, and the following day, 7000 troops were landed under Sir David Baird. The capitulation was signed on the 10th, by general Jansen, the Dutch governor.

Religion.] Calvinism was the established religion of the colony while in the hands of the Dutch. Other sects were tolerated. The Lutherans and Methodists had each a church at Cape Town. The Malay Mahometans, having been refused a church, performed their public service in the stone quarries at the head of the town. The funds of the Calvinistic church at that place, in 1798, amounted to 22,168*l.* 8*s.* 8*d.*; and their annual grants to the poor, to 1,112*l.* 17*s.* The funds of the Lutherans were 14,829*l.* 13*s.* 2*d.*; and their grants to the poor, 194*l.* 9*s.* 2*d.* The Church of England is probably now established.

Missions.] The Moravians, many years ago, established, and have to this time successfully maintained, a mission at Bavian's Kloof, within the limits of this colony. About the beginning of the present century, immediately after the Cape of Good Hope and its dependencies came into the possession of the British nation, a number of missionaries, with the venerable Dr. VANDER-KEMP at their head, were sent to this southern part of Africa, by the London Missionary Society, whose labors among the colonists, but especially among the natives, have been attended with various degrees of success, and are still continued.

Government.] Previous to the first seizure by the English, the colony was committed to the direction of a governor, appointed by the East India Company. After the capture it was entrusted to a governor and lieutenant governor, appointed by the crown; who also constituted the high court of appeals. A burgher senate, or council of burghers, consisting of 7 members chosen out of the burghers of the town, is a court having original jurisdiction in the cape district, and appellate jurisdiction in the other three. Over each district is placed a civil magistrate, called a *Landrost*; who, with six *Hemraaden*, or a council of county burghers, have power to regulate the police of the district, superintend the affairs of government, and adjust litigations. An appeal lies from them to the burgher senate.

Population.] Barrow estimated the population of the whole colony, in 1797, whites, slaves, and Hottentots, at 60,000, or 1 to every 2 square miles; of whom 22,000 were christians. The population of the cape district, at that time, consisted of 6,261 free persons, chiefly whites, and 11,891 slaves: total 18,152. As the colony was very flourishing during its former possession, and has been equally so since the late capture, its population must have greatly increased.

Revenue.] The revenue is collected from rents of leased lands; taxes on produce, auctions, the of sale lands and buildings,

the customs and port fees, portage, seizures, fines and penalties, licenses, loans, and stamps. In 1801 it amounted to 90,142/. 13s. 4d. sterling ; and, during the whole government of Lord Macartney, was more than adequate to the expenditure.

Manners and Customs.] The free inhabitants of the colony consist of 4 classes : the inhabitants of the capital, wine-growers, corn-farmers, and graziers. The inhabitants of the town consist of the magistrates and clergy ; of a sort of gentry, who, having estates in the country, retail the profits of them by means of their agents, usually Jew brokers, with whom they lodge while in town ; of a number of petty dealers, who call themselves merchants ; of mechanics, who carry on their several professions by their blacks ; and of free people of color, many of whom are mechanics and fishermen. Almost all of these are petty dealers in some way or other ; and they have all a remarkable propensity for public vendues. Their chief amusements are eating, drinking, and smoking. There is not a bookseller's shop in the town. The wine-growers are chiefly of French extract. They live on lands possessed in fee, and occupy the best houses and most valuable estates in the country. These estates are each of about 120 acres, and lie principally in the Cape District. The corn-boors live in the same district, and in those parts of Stellenborch within 3 days journey of the town. They are next in rank to the wine-boors. They have little intercourse with each other, and spend the day in smoking, in lording it over a few Hottentots, and in indulging to excess in the gratification of every sensual appetite. The graziers are in the more distant parts of the colony, and are the least advanced in civilization. They live in hovels, having two rooms, in which the parents, children, and house Hottentots all sleep. Their bedding consists of skins. The walls of their hovels are formed of mud or clay, baked in the sun. As to their clothing, they wear a broad-brimmed hat, a blue shirt, and leather pantaloons, no stockings, and a pair of dried skin shoes. The women have a thick quilted cap that ties with two broad flaps under the chin, and falls behind across the shoulders ; a short jacket and a petticoat, but no stockings, and often no shoes. A large iron pot serves both to boil and broil their meat. They have neither linen for the table, nor knives, forks, or spoons. The bon carves with a large jack-knife for himself and the family. Their huts and their persons are equally dirty ; and their whole appearance betrays an indolence of body, and a grovelling mind. The women are greater drudges than the men, and yet these are not industrious. Thongs cut from skins serve for ropes, and fibres for thread. The *kraals*, or folds of the cattle, are in front of the doors of their houses, and are never cleaned out. All the boors are extremely cruel in their treatment of the Hottentots.

Towns.] CAPE TOWN, the capital, is situated on the S. E. angle of Table Bay. The Bay is faulty in every point that constitutes a proper place for the mart of shipping, and so boisterous for 4 months in the year, May, June, July, and August, when the N. and N. W. winds are strongest, that no ship can enter it. Dur-

ing those months ships put into Simon's bay, a cove or indent on the western shore of False bay, where they find a safe harbor. During the other 8 months, when the S. E. winds are predominant, Table bay affords a most secure shelter. The town is built on a sloping plain, that rises with an easy ascent to the feet of Devil's hill, on the E. of Table mountain on the S. and of Lion's Head on the N. W. The citadel or castle, is a pentagonal fort, which commands the town and the anchorage ; but is itself commanded by the commencing acclivity on the E. This acclivity is now occupied by various redoubts, batteries, and block houses, commanding each other. Fort Knokke is connected with the citadel by a rampart drawn along the shore, called the *sea lines*, defended by several batteries, mounted with heavy guns, and furnished with ovens for heating shot. On the W. of the bay are three strong batteries, *Rogge-bay*, *Amsterdam*, and *Chavonne* ; all the guns of which bear upon the anchorage. The *Mouille* is another, commanding the entrance. The streets are straight, and cross each other at right angles. Many of them are well paved, open, and airy ; with canals of water running through them, walled in, and planted on each side with rows of oaks. Three or four public squares give an openness to the town. In one is held the public market ; another is the resort of the peasantry with their waggons ; and another, near the shore of the bay, and between the town and the castle, is a place of parade for the troops. This is an open, airy, and extensive plain, perfectly level, composed of a bed of firm clay, covered with small hard gravel. It is surrounded by canals or ditches, which receive the waters of the town, and convey them into the bay. Two of its sides are completely built up with large and handsome houses ; and a third is occupied by the barracks, a large, well-designed regular building, with two wings. The upper part of this building is large enough to contain 4000 men. The castle contains barracks for 1000, lodgings for the officers of one regiment, magazines for artillery, stores, and ammunition, and most of the public offices of government. The other public buildings are a Calvinist, Lutheran, Episcopal, and Methodist church, a guard house, in which the Burgher Senate meet, a large building for the government slaves, and a court house. The houses, 1145 in number in 1797, are built with great regularity and order. They are generally white-washed, with the doors and windows painted green, two stories high, with flat roofs, and a kind of pediment in the centre of the front. The population at that time consisted of about 5,500 whites, and 12,000 blacks. The number of marriages for 8 years (1790-1798) was 1449, of baptisms 2589, and of burials 1173. The whites are on the whole, an idle, dissolute race of men, subsisting chiefly on the labor of their slaves. Provisions are very cheap, while labor is dear ; as are house-rent, fuel, and clothing. Immense numbers of dogs prowl about the streets, particularly by night, when they quit their dens and lurking places in quest of the offals of butchers' shops ; and the wolves and hyenas occasionally descend from their dens in the Table Mountain,

.to dispute their spoil with the dogs. At such times the town resounds with their hideous howlings during the whole night. The settlers seem to have fixed on this spot for the site of the town, for the convenience of water, which rushes in a plentiful stream out of the Table mountain.

Travelling.] The roads near the cape are good. But in the great body of the colony, their character depends on the nature of the surface and of the soil ; as they are wholly neglected by the boors. The passes of the mountains, and the fords of the rivers, are often extremely difficult and dangerous. The established mode of performing long journeys, is in covered waggons, drawn by bullocks. These carriages are strong, light, and expensive ; and in them are carried all the necessaries for a journey in a country where there are no taverns, and where often the houses are many days' journey apart. They are drawn by a team of 10 or 12 oxen. Each day's journey is from 5 to 15 hours, according to local circumstances. It is customary to travel by night, that the cattle may graze, or rather browse, by day. Where the country is tolerably level, and the surface hard, an ox will travel 3 miles an hour ; at which rate he will continue 10 or 12 hours without halting. As a specimen of the common difficulties of travelling, Barrow mentions the manner of crossing Breede river, a stream 40 yards wide. This is done by a small flat bottomed tub, about 6 feet by 3. In this machine two travellers haul themselves over, by a rope fixed to two posts, one on each side of the river. When a horse is to cross, the saddle is taken off, the rider gets into the tub, and drags the animal after him. But when a waggon is to be transported, it must first be unladen, and the baggage carried over in the vessel ; the carriage is then made fast by one end to the tub, and the other is buoyed up by a cask, and in this manner it is dragged over. Thus half a day is spent, when a few planks properly put together, would enable a waggon to pass in 5 minutes.

Hospitality to strangers characterizes all the boors. A countryman, a foreigner, a relation, a friend, are all equally welcome to whatever the house will afford. A Dutch farmer never passes a house on the road without alighting, except indeed his next neighbor's, with whom it is ten to one he is at variance. If two peasants meet, though perfect strangers, they instantly dismount to shake hands. When a traveller arrives at a habitation, he alights, enters the house, shakes hands with the men, kisses the women, and sits down without farther ceremony. When the table is served, he takes his place without an invitation. If there is a bed in the house, he has it. If not, he sleeps on a bench or a heap of sheep skins, among the rest of the family. In the morning, after a solid breakfast, he takes his *sofie*, or a glass of brandy, orders his Hottentot to get ready the horse or waggon, shakes hands with the men, and kisses the women ; he wishes them health, and they wish him a good journey. In this manner he may pass through the whole country.

Commerce.] Wine and brandy are the staple commodities of the Cape. Ten or twelve different kinds of wine are manufactured.

The other exports are grain and pulse, wool, hides and skins, whale oil and bone, dried fruits, salt provisions, soap and candles, aloes, ivory, ostrich feathers, and tobacco. The value of wine and brandy exported, is about £50,000; that of aloes 6500; that of skins 6000; that of dried fruit 3000; that of ivory 1600; and that of ostrich feathers 1000. The total value of exports for 4 years, (1799—1802) was £300,925. The imports for the same period, amounted to £1,195,507 3s. 6d. currency. The imports from England were woollens, cottons, hardware, cutlery, haberdashery, millinery, boots, shoes, stationary, furniture, paints and oils, earthen ware, naval stores, smoked meats, cheese, and pickles; from the E. Surat piece-goods, tea, coffee, sugar, pepper, spices, and rice; from America, lumber, salt-fish, pitch and turpentine; from the N. of Europe, iron, plank, French wines, beer, gin, Seltzer water, coffee, and preserves; and slaves from the coast of Guinea. The small amount of exports, was owing to the previous severe restrictions of the Dutch East India company, by which the enterprize of the colony had been completely cramped; and from the effects of which, it will demand a considerable period of liberal encouragement to raise it.

CHAPTER II.

NATURAL GEOGRAPHY.

CLIMATE, FACE OF THE COUNTRY, AGRICULTURE, RIVERS, BAYS, MOUNTAINS.

Climate.] THOUGH it has been usual to consider the year as consisting of two periods, the good and the bad monsoon; yet, as these are neither regular in their returns, nor certain in their continuance, the division into four seasons, the reverse of those in northern latitudes, is more proper. The spring, from the first of September to the first of December, is the most agreeable. The summer, from December to March, is the hottest; the autumn, from March to June, is variable, but generally fine and pleasant weather. The winter, from June to September, though the greater part of the time pleasant, is frequently stormy, rainy, and cold. The two most powerful winds, are the N. W. and S. E. The first commences towards the end of May, and blows occasionally to the end of August, and sometimes to the end of September; usually about 4 months in each year. The S. E. predominates the rest of the year; and, when the cloud shows itself on the mountain, blows with great violence. “In the midst of one of these storms of wind,” says the Abbé De la Caille, “the stars look larger, and seem to dance; the moon has an undulating tremor; and the planets have a sort of beard, like comets.”

The approach of winter is first observed by the S. E. winds becoming less frequent, less violent, and blowing *clear*, without

the fleecy cloud on the mountain. Dews then begin to fall very heavy, and thick fogs hang, in the morning, about the hills. The N. W. winds feel raw and cold, and increase at length to a storm, with heavy rain, thunder and lightning, continuing generally for two or three days. When the weather clears up, the high mountain tops appear buried in snow, and the Table Land has also a slight sprinkling of snow or hail. At such times the thermometer at sunrise is about 40° , and at noon rises to 70° ; making a variation of 30° in 5 or 6 hours. The general standard for the three winter months may be reckoned from 50° at sunrise, to 60° at noon. In the middle of summer it varies from 70° to 90° ; but generally rests for days together at 83° or 84° . It has been known to exceed 100° , but this is rare. The heat of summer is seldom oppressive. The mornings are sometimes close and sultry, but the nights are always cool. A S. E. breeze usually blows from noon till evening. When violent, and accompanied with the fleecy cloud on the mountain, a storm of rain usually commences at 2 P. M. and continues in squalls till midnight. From November to April, a shower of rain scarcely ever falls.

The barometer stands higher in the clear cold days of winter, than in the settled serene weather of summer. The height of the column varies in the former season from 29.46 to 30.35 inches; one point indicating a storm, with rain, thunder, and lightning; and the other settled fair weather. The changeable point is about 29.95 or 30 inches. The slightest alteration is sure to indicate a change of weather. The range of the mercury in summer is still less, being scarcely ever above 30.10, or below 29.74. The S. E. winds seldom occasion a change of more than 0.15. Happy for the inhabitants of the town, these winds keep up a constant circulation; without which, the reflected heat from the naked front of the Table mountain, would make the town insupportable.

Most of the fatal diseases proceed rather from the mode of living, than from the climate. The very frequent *consumptions* are attributable partly to the sudden changes of temperature; and partly to imprudent exposures, and the very free use of spirituous liquors. A confined and sedentary life; eating to excess, commonly thrice a day, of animal food swimming in fat, or made up into high-seasoned dishes; drinking raw ardent spirits; smoking tobacco; and, when satiated with sensual indulgence, retiring in the middle of the day to sleep; seldom using any kind of exercise, and never such as requires bodily exertion; are the usual habits, in which a native of the Cape is educated. An *apoplexy*, or *schirrous liver* is the consequence. The former is seldom immediately fatal, but terminates in a *dropsy*. The diseases of children are *eruptions* and *sore throats*. The *small-pox* and *measles* are not endemic. Instances of longevity are rare; few living more than 60 years. The mortality in the town among the whites is $2\frac{1}{2}$ in the 100, and among the slaves 3 in the 100. *Bilious fevers* carry off a good many of the slaves in the country.

Face of the Country.] The Cape Peninsula is a high mountainous tract, between Table and False Bays, 36 miles from N. to

S. and 8 from E. to W. connected with the main by a low flat isthmus, from 20 to 30 feet above high water mark. This isthmus has few irregularities of surface, except such as are made by ridges of sand, adventitiously brought thither by the strong S. E. winds from the shores of False Bay. The Table Mountain, flanked by the Devil's Hill on the E. and the Lion's Head on the W. forms the northern extremity of the peninsula. It is composed, properly speaking, of one mountain, called the *Table Land*, broken indeed into masses more or less connected by several gorges. Some of these masses have horizontal summits; others peaked and conical; some consist of broken fragments of rock; others are clothed with verdure. The sandy isthmus is limited on the E. by a short range of hills, called the *Tigerberg*, at the foot of which are several fertile farms, gardens, vineyards, and fruit yards. On the southern coast lies an irregular belt of land, from 20 to 60 miles broad, generally level or agreeably uneven, indented by several bays, intersected by numerous streamlets, well clothed with grass, and small arboreous, or fruitescent plants, well-wooded in many parts with forest trees, supplied with frequent rains, and enjoying a mild and agreeable temperature. The first chain of mountains bounds it on the north. Beyond this chain lies a valley, about as wide as the belt on the shore, of a very varied surface, composed in some parts of barren hills; in others of naked arid plains, called, by the Hottentots, *Karroos*; and in others of choice patches of well-watered and fertile grounds. The general surface of this second belt, has a considerable elevation above the first, and a less uniform temperature; it is far less valuable. On the N. it is limited by the *Zevarte Berg*, or *Black mountains*. Beyond this chain lies the Great *Karoo*, or arid desert, inhabited by no human creature. This is about 300 miles from E. to W., and 80 in breadth, and is far more elevated than the second belt. It is scarcely ever moistened by a shower of rain, exhibits a surface of clay, thinly sprinkled over with sand, out of which a few shrivelled and parched plants here and there meet the eye, faintly extending their half withered fibres along the ground, and straggling, as it were, to preserve their existence against the excessive heat of summer, and the severe frosts of winter. The *Nieuwveldt's Gebergte*, limits the Grand Kooroo on the north.

On the western coast, the country likewise ascends from the shore, in successive terraces. Only a single chain of moutains runs due N. and S. This commences at the *Hanglip*, the S. E. promontory of False Bay; and, crossing *Berg River*, continues a direct course to Olifant's River, 210 miles. The belt between it and the sea is about as broad as that on the southern shore, but far less fertile. The other belts and chains run from S. E. to N. W. are successively higher than the first, and are merely continuations of those heretofore mentioned, in a N. W. direction. The most elevated chain, the *Roggeveld*, falls in with the *Nieuwveldt*, and is indeed the same. North of Olifant's River, the continuation of the *Zevarte Berg*, here called *Karree Berg*, is the chain nearest to the shore. Between this and the *Roggeveld* lies

the continuation of the Great Karroo. The whole tract of country to the N. of the Cape, is much more sandy, barren, and thinly inhabited, than to the E. in which direction it increases in beauty and fertility with the distance.

Agriculture.] Barrow calculates that at least half of the land in the colony may be considered as an unprofitable waste, unfit for any sort of culture, or even to be employed as pasture for cattle. The lands of this description are either *kooroos*, level, arid plains, producing a few straggling tufts of acrid saline, and succulent plants; or chains of mountains either totally naked, or clothed in parts with sour grasses only, or such plants as are noxious to animal life. In Europe the breath of horned cattle is proverbially sweet; in this colony, owing to the multitude of these acrid plants, it is altogether nauseous.

The lands are held by the colonists by different tenures. Those in *fee simple* are chiefly in and near the Cape District, and are the choicest patches of land, consisting of 120 acres each. The *quit rents* are waste grounds, contiguous to other estates leased by government for 15 years, at a shilling per acre. Of these there are 35. The *gratuity lands* are a sort of customary copy-holds, 107 in number, not of any determinate size, and paying a rent of 24 rix-dollars a year. The *loan-lands* were farms granted to the first settlers, and are each a square of 3 miles on a side, (9 square miles, or 5760 acres) paying a rent of 24 dollars per farm. In 1798 the number of these farms was 1832, containing 16,488 square miles, or 10,552,320 acres, renting at 43,978 rix-dollars.

Wine is chiefly cultivated in an extensive valley on Berg River, called *Drakenstein Valley*, commencing about 60 miles E. of the Cape. This valley is a remarkably fertile tract of land, and is owned wholly in *fee simple*. About 5000 vine-stocks are planted on an acre, and 1000 of these will yield a *leaguer*, or pipe of 154 gallons. The variety of wines is very great. About 6000 *leaguers* are made annually in this valley. Great quantities of choice fruits are also raised here; and every month in the year, at Cape Town, the table may be supplied, at a very low rate, with 10 or 12 different sorts of fruit, all excellent. The celebrated *Constantia wine* is raised on two farms, close under the mountains, about midway between False and Table Bays. One of the farms produces the *white*, and the other the *red Constantia*. From 150 to 200 *leaguers* are annually made of both. The following table shows the quantity and value of the genuine *Constantia*, exported in four years.

Years.	Leaguers.	Rix-Dollars.
1799,	157	11,752
1800,	188	14,070
1801,	173	13,007
1802,	210	15,745

The other Cape wines are often fraudulently sold for *Constantia*. The colonists are generally very bad agriculturalists. They

rarely manure, except for barley; and the plows they use are Dutch instruments. The common returns are 15 for 1; in the good lands, from 20 to 30. The grain is trodden out by cattle. Cotton succeeds well in the light sandy soils. The tea plant has long been in the colony, but is totally neglected. The coffee and sugar cane may both be profitably cultivated. Two species of indigo grow wild. Flax yields two crops a year. Hemp is raised in lieu of tobacco. The cactus, on which the cochineal insect feeds, grows wild. All the distant farms are devoted to grazing, and immense numbers of cattle are annually raised for exportation, and driven from 100 to 600 miles to Cape Town.

Rivers.] All the large rivers of the colony rise from the Nieuwveldt range, and from the Roggeveld, its continuation. They all have bars of sand at their mouths. Great Fish River empties in lat. 38° 25', S. and lon. 27° 37', E. 580 miles E. of the Cape. It is here very deep, and from 300 to 400 yards broad. It rises in the N. E. part of the colony, issuing from that part of the Nieuwveldt, called the Zwerenberg; on the other side of which the head waters of Orange river are turned off to the western coast. It runs in a S. and S. S. E. course about 300 miles.

Sunday River rises in that part of the same chain, called Compassberg; from the opposite side of which flows Sea-Cow River, a large branch of the Orange. It is at least 250 miles long; and, running S. and S. S. E. falls into Zwartkopi's Bay.

Great River runs about the same distance, first S. and then S. E. falling into Camtoos Bay. It crosses the Great Karroo.

Gauritz River empties a little W. of Muscle Bay. It may properly be called the Sink of the Colony. All the waters that originate within 150 miles to the E. or W. upon the Great Karroo, and along the Nieuwveldt, meet in one immense chasm of the chain of mountains nearest the sea, and are discharged through the channel of the Gauritz. In the dry season, it is easily forded; in the rainy seasons, it has been known to rise to the height of nearly 100 feet, leaving ruin and desolation behind it. The Ghamka, or Lion's River, is its principal source; which rises on the opposite side of the same mountain, that turns off Sack River, to the northward, and running about 180 miles S. and S. W. receives Olifant's River from the E. a large stream, issuing from the Zwartberg, near Great River, and flowing due W. 120 miles. About 20 or 30 miles below, it is joined by Buffaloe River from the N. W.

Breede, or Broad River, rises in the Zwarteburg, and runs S. E. to St. Catherine's Bay, about 150 miles.

Berg River rises in the opposite side of the same mountains, and runs N. W. to St. Helena Bay, about the same distance.

Olifant's, or Elephant's River, an Atlantic stream, heads near the sources of the Buffaloe, and runs N. W. and W. about 300 miles, emptying in lat. 31° 30', S. It has several large branches.

The Koussie is the N. W. limit of the colony.

Bay.] St. Helena Bay resembles Table Bay in its position and

figure, is a little more open and exposed to the N. and N. W. winds, but has much clearer anchorage.

Saldanha Bay, as a spacious, secure, and commodious sheet of inland sea-water, for the reception of shipping, can scarcely perhaps be equalled. It extends in length about 15 miles in the direction of the coast, which is here about N. by E. and S. by W. The entrance is near the N. end, through a ridge of granite hills, moderately high. In the entrance are three rocky islands, two of which, named *Jetten* and *Malagas*, are partly without; and the third a flat, naked rock, called *Marcus*, is directly in the mouth of the passage, a little more than a mile from the southern shore, and three fourths of a mile from the northern. These and the island once fortified would render the bay absolutely inaccessible to an enemy's fleet. The north part of the bay, called *Houtjes Bay*, is the best anchoring ground, and is only 15 miles across to *Helena Bay*. The want of fresh water alone prevented the establishment of the town on Saldanha Bay.

Table Bay has heretofore been described.

False Bay is a large body of water in the shape of a parallelogram, E. of the Cape Peninsula, opening into the Southern Ocean, between the Cape of Good Hope on the W. and Hanglip Point on the E. It sets up northward about 30 miles, and is of about the same breadth. On its west shore are numerous small bays or indentations.

Muscle Bay, like all those on the southern coast, is open to the S. E. but has a safe and good anchorage in most winds. The western point, Cape St. Blaize, is in lat. 34° 10' S. and lon. 22° 18' E. 240 miles from the cape. A magazine for the reception of grain is erected near the landing place. It is a strong stone building, 150 feet long, and will conveniently hold 10,000 bushels. The bay abounds with excellent fish.

Plettenberg's Bay is 320 miles from the cape. The west point, called Robenberg's Point, is in lat. 34° 6' S. and lon. 23° 48' E. The eastern shore rounds off into the general tending of the coast. At the landing place are a new and handsome dwelling house; a magazine for the reception of timber, 200 feet long; and a strong commodious building for the reception of troops.

Camtoos Bay is merely a wide open indentation of the coast. *Zwartkops*, or *Algoa Bay*, is open to all winds from N. E. to S. E. It has a good bottom, and five fathoms depth, at the distance of a mile. The landing place is in lat. 33° 56' S. and lon. 26° 53' E. 500 miles from the cape. The mouth is 20 miles broad. Fresh water is abundant.

Mountains.] The north front of the *Table Mountain* directly facing the town, has a horizontal ridge two miles in length. The bold face, that rises almost at right angles to meet this ridge, is supported, as it were, by a number of projecting buttresses which rise out of the plain, and fall in with the front, a little higher than midway from the base. The height of the ridge is 3,582 feet. The E. side is still bolder, and has one point considerably higher. The W. side along the shore is rent into deep chasms, and is worn

away into a number of pointed masses. In advancing to the southward about four miles, the mountain descends by a succession of terraces to the level of the chain that extends to the cape. Devil's Hill is merely a wing of the Table Mountain, on the E. 3,315 feet high; as is Lion's Head another on the W. 2,160 feet high.

Barrow does not mention the name of the chain nearest the southern coast. Its elevation is no where great, and it is broken by all the considerable rivers. The *Zwartberg* is much more lofty and rugged, and consists in many instances of double, and sometimes of treble ranges. He says that the height of the *Nieuwveldt* is at least 10,000 feet. Its summits are usually covered with snow six months in the year.

WESTERN COAST AND INTERIOR OF AFRICA.

SCARCELY any thing is known of the coast between the mouth of the *Koussie* in lat. 29° 55' S. the northern limit of the colony of the Cape; and Cape Negro in lat. 16° 15'. Very few of the Namaquas are found N. of the Koussie. Barrow says, that the whole coast between the Koussie and the Orange, in lat. 28° S. is a mere desert, perhaps a continuation of the Great Karroo. *Orange river* rises in the country of the *Bosjesmen*, in the N. E. corner of the Cape colony, in about lat. 31° S. and lon. 27° E. and empties in lat. 28° S. and lon. 16° E. The distance of these two points, in a direct line, is about 650 miles. Its whole length is at least 1000. Barrow saw it 70 or 80 miles from its source. It was from 300 to 500 yards broad, and the volume of water was immense. Like the Nile, it has its inundations and its cataracts.

The whole coast, from Cape Negro, in lat. 16° 15' S. to the head of the Gulf of Guinea, is called the *Coast of Congo*; because it is said to have been all formerly subject to the king of Congo.

BENGUELA. This is a kingdom of considerable extent, and is said to reach from Cape Negro to the mouth of the Coanza, in lat. 9° 54' S. about 150 leagues. It was formerly powerful; but the *Jagas*, or *Giugas*, who border it on the E. have greatly reduced its strength. *St. Philipe de Benguela* is a town, in lat. 12° 8' S. on the S. side of a large bay, called *Bahia das Vaccas*, in which the Portuguese have a fort and a settlement. *Old Benguela* is a town on a high mountain, near the coast, in lat. 11° 5' S. carrying on a considerable trade in provisions and ivory; for which it receives muskets and other fire arms. The country is chiefly mountainous, and swarms with wild beasts. It is said to be extremely unwholesome near the coast.

ANGOLA. The extent of this country, on the coast, is not very great, as it reaches only to the mouth of the river Dando, in lat. 8 S. Benguela, however, is so far dependent on it, that it is often spoken of as a part of Angola. The Portuguese have several forts on the coast.

CONGO. The northern boundary of Congo is said to be the Zair, or *River of Congo*, which divides it from Loango, in lat. 6 30 S. It reaches very far into the interior, and has Fungono on the N. E. and Matamba on the S. E. When the Portuguese first discovered this country, in 1484, it was covered with large towns and villages, and the capital contained 50,000 inhabitants. The army of the king was numerous and powerful. He is despotic, is elected by the nobles out of the seed royal, and is the proprietor of all the lands in his dominions. He has a brilliant court, a strong body-guard, and a numerous haram. Great numbers of petty princes are tributaries. Treason and murder are punished with decollation, and sorcery with burying alive. Hanging, the bastinado, fines and imprisonment, are the punishments for lesser offences. The king was early converted by the Portuguese to the Catholic faith, and a profession of that faith is said now to be an indispensable requisite for the succession to the throne. Numbers of the Congolese also are Catholics; but a great majority are Pagans. These worship various animals. The natives are blacks, with curled hair, and deep black eyes. They have not the flat noses and thick lips of the Guinea negroes; and are of a middle stature. They are described as indolent, licentious, cruel, faithless, and without natural affection. *Banza*, or *St. Salvador*, their capital, is situated 40 leagues up the Zair, on a rocky eminence, and is said to contain a number of churches, and about 40,000 inhabitants, of whom about 4000 are Portuguese, who reside in a quarter by themselves. The inhabitants receive the products of Brazil, and the manufactures of Europe, in return for slaves, of whom about 16,000 are annually procured for the Portuguese. The rainy season lasts from October to March. The first harvest is sown about the last of January, and reaped in April; the second is sown in September, and reaped in December. The soil is generally excellent, and the surface uneven. Millet, maize, the sugar-cane, and various excellent fruits, particularly several varieties of the palm are cultivated. The Zair is a very long and large river, probably not inferior in size to Orange river. Copper and iron are procured from the mines.

LOANGO. We know not how far this country reaches to the N. Some writers extend it to Benin; but Biafra is certainly between. Perhaps Cape Lopez de Gonsalvo may be taken as its northern limit. It was anciently dependent on Congo; but the mani, or petty princes, revolted, and one of them at length subdued the others. The king is powerful, and is addressed by his subjects by the title of *Sambo Pongo*, the name of their deity. The country is populous. The inhabitants are Pagans, but use circumcision. Their dress is formed of the leaves of the palm, and consists of a garment fastened at the girdle, and

depending to the ankles. They wear numerous beads round the neck. Polygamy is common. They are licentious to an extreme. Loango, the capital, is in latitude 4° 40' S. on a considerable river, about 2 leagues from the sea. The streets are wide and clean, and are planted with palm-trees. The palace consists of an immense number of buildings, surrounded by a palisado, and having a large open square in front. The haram is numerous. The houses are of one story, and are fenced round with hedges. The town is large and populous. The exports are principally slaves and copper; ivory, tin, and iron, are also articles of commerce. The climate is remarkably hot. The soil is fertile, but the agriculture is miserable.

BIAFRA. This kingdom is said to be powerful and populous. It bounds N. W. on Benin, reaching to the head of the gulf of Guinea. It has a capital of the same name, and the bay on its coast is called the *Bite of Biafra*. The natives are idolaters.

GUINEA. The whole coast, from the mouth of the *Del Rey*, in lon. 8° 30' E. to that of the Mesurada in 11° W. about 500 leagues, is called the **COAST OF GUINEA**; and the country of Guinea, is considered as extending northward to the Mountains of the Moon; an immense chain, heretofore described, stretching from E. to W. parallel with the coast, at the distance of about 6 degrees of latitude. On the coast it is divided into *Benin*, on the E. reaching to the *River Volta*, 220 leagues; *Guinea Proper*, reaching thence to Cape Palmas 180; and *Malaqueta*, or the *Grain Coast*, between Cape Palmas, and the Mesurada.

BENIN. The country so named, is divided into *Benin Proper*, in the E. *Whidah* in the middle, and *Ardra* in the W. Each of these has its own monarch. The king of Benin Proper has a large revenue, and can bring 100,000 men into the field. Their arms are swords, poinards, javelins, bows, and poisoned arrows. The inhabitants acknowledge a Supreme Being; but they chiefly worship an evil spirit, who is considered as the author of all their calamities. Polygamy is common. They have no idea of personal purity. The dress of the better sort is of fine calico, made into a species of drawers, covered with a sort of calico apron. They cultivate the ground, and carry on various manufactures. Almost all the labor devolves on the women. *Benin*, the capital, is in lat. 6° 38' N. and lon. 4° 47' E. on the river *Benin*, or *Formosa*, 69 miles from Agatten, at its mouth. It is said to be 4 miles in circumference, and to contain 30 long, broad, and straight streets, of low houses. The streets are adorned with a variety of shops, filled with European wares. The palace is very extensive. None but natives are permitted to live here. The entrance to the city is through a wooden gate, where a guard is stationed to collect the customs on merchandize.

This country has been one of the principal marts for slaves. All those purchased on this coast, except a tribe known by the name of "*Mocoes*," are called in the West Indies, "*Eboes*," probably from *Arebo*, a town on the river *Benin*. In general they appear to be the lowest, and most wretched of the African nations.

In complexion they are much yellower than those from Guinea Proper ; but it is a sickly hue, and their eyes appear as if suffused with bile. The features of most of them resemble those of the baboon ; particularly in the great elongation of the lower jaw. As slaves in the West Indies, they are constitutionally timid and despondent ; often seeking relief from their melancholy in voluntary death. The women labor better than the men. In their own country, they are nevertheless cannibals. There they worship the *guana*, a species of lizard, and offer to it human sacrifices. They also practise circumcision.*

The coast of Benin is generally low and marshy, and the climate unhealthy. The soil is fertile, and produces a great variety of fruits, also millet, maize, and pepper. The *River Benin* is a considerable stream, emptying by a number of mouths. The *Ca-kabar* is a large river near the eastern frontier.

WHIDAH is a much smaller kingdom than the preceding ; but is remarkably fertile and populous. It is described as being a continued village. It is divided into a number of lordships, all subject to one monarch, who resides at *Sabi*, a town about 8 miles from the sea. The inhabitants know many of the arts of civilized life. They are enterprising and industrious. The commerce of the country is extensive, and the manufactures are important. Slaves are the chief exports.

These slaves in the West Indies are called *Papaws*, and are the most docile, submissive, and well-disposed of any that are imported from Africa. They are ingenious and industrious ; addicted at the same time to thieving and gambling ; and extremely apprehensive of death. Many of them are circumcised.†

The natives are generally tall, well made, straight and robust ; of a deep black, but less glossy than those of Guinea Proper. Their money, called *Besjis*, consists of shells strung on a cord. The country is well cultivated, and is described as a continued garden.

ARDRA lies between Whidah and the Volta, and extends far into the interior. Its government is despotic, and the crown hereditary. The court is numerous and splendid. The chief priest is prime minister. The soil is fertile, producing millet, maize, yams, potatoes, lemons, oranges, cocoa nuts, and the palm. Salt is made near the sea. The manners of the people resemble those of Whidah. The country is populous.

GUINEA PROPER. This country is divided into the *Gold Coast*, on the E. and the *Ivory Coast*, on the W. The latter is the most extensive, reaching eastward nearly to Cape Three Points. Both are divided into numerous petty principalities, independent of each other, and engaged in almost constant wars. This renders them intrepid and ferocious. The prisoners are always sold as slaves. The climate is healthy to the natives, but prejudicial to Europeans. Slaves, ivory, and gold, are exported to a great extent. There are several establishments of the English on the coast. All the slaves from this coast are, in the West Indies,

* Edwards's West Indies, h. 280—291.

† Edwards.

called *Koromantyns*. They are distinguished from all the other negroes by firmness, both of body and mind, by activity, courage, and an elevation of soul, which prompts them to enterprises of difficulty and danger, and enables them to meet tortures and death with fortitude or indifference. They sometimes labor with great promptitude and alacrity, and have constitutions well adapted for it. These are usually such as have been slaves in their own country, having been sold for their debts, or their crimes. The great body of them are prisoners of war, always ready by the most desperate measures to regain their freedom. Most of the insurrections in the islands are owing to them. Edwards* gives an account of a formidable insurrection in Jamaica, in 1760, occasioned by 100 newly imported *Koromantyns*, all on one plantation. After it was quelled, three of them were made examples of. One was burnt alive, and two were gibbeted. "The wretch that was burnt, was made to sit on the ground, and his body being chained to an iron stake, the fire was applied to his feet. He uttered not a groan; and saw his legs reduced to ashes with the utmost firmness and composure: after which, one of his arms by some means getting loose, he snatched a brand from the fire that was consuming him, and flung it in the face of the executioner. The two that were gibbeted were indulged, at their own request, with a hearty meal immediately before they were suspended. From that time till they expired, they never uttered the least complaint, except of the cold in the night, but diverted themselves all day long in discourse with their countrymen. One of them silently expired on the morning of the 8th day, and the other on that of the 9th." Even the children of the *Koromantyns* discover the same evident superiority, both in hardiness of frame, and vigor of mind. "A gentleman of my acquaintance," says Edwards, "having bought 10 *Koromantyn*, and 10 *Eboe* boys, caused them to be collected in my presence, to be marked on the breast. This operation is performed by heating a small silver *brand*, composed of one or two letters, in the flame of spirits of wine, and applying it to the skin, which is previously anointed with sweet oil. When the first boy, who happened to be one of the *Eboes*, and the stoutest of the whole, was led forward to receive the mark, he screamed dreadfully; while his companions of the same nation manifested strong emotions of terror. The gentleman stopped his hand; but the *Koromantyn* boys, laughing aloud, immediately came forward of their own accord, offered their bosoms undauntedly to the brand, and receiving its impression without flinching in the least, snapt their fingers in exultation over the poor *Eboes*." One cannot surely but lament that a people thus naturally emulous and intrepid should be sunk into so deplorable a state of barbarity and superstition; and that their minds should ever be broken by the yoke of slavery.

In their own country masters have the power of life and death over their slaves, and parents over their children. Prisoners tak-

en in war are either sold or butchered, with circumstances of outrageous barbarity. When a great man dies, several of his wives, and great numbers of his slaves, are sacrificed at his funeral. They believe in a God of the Heavens, the Creator of all things, called *Accompong*, to whom they offer only praise and thanksgiving. *Assarci* is the god of the earth ; to him they offer the first fruits, and pour out libations. *Ipoa* is the god of the sea : if the arrival of ships trading on the coast is delayed, they sacrifice a hog to deprecate his wrath. *Obbone* is the author of all evil ; to him they sacrifice prisoners, or slaves. Besides these every family has a tutelar saint, who is some ancestor : on the anniversary of whose burial all his descendants assemble round his grave, and sacrifice a cock or a goat.

GRAIN COAST, OR MALAGUETA. This country, 100 leagues in extent, from Cape Palmas to the Messurada, produces a great abundance of Guinea pepper, called *Malagueta* by the Portuguese, and often *Grains of Paradise* by the English. Hence its names. It is said to be subject to a single monarch, whose power is despotic, and who assumes great pomp and magnificence. The people are Pagans, worshipping the moon, and believing in sorcery. Great numbers of them are mulattoes. These carry on the commerce of the country, and are the *relicues* of the old Portuguese traders ; that nation having long since been banished from the coast. The natives freely offer their wives and daughters to Europeans. They are strongly addicted to stealing. But few slaves are procured here. The English engross the whole commerce. Guinea pepper is the chief export.

The remainder of the coast, between the *Mesurada* and Cape Bojador, the S. W. extremity of Morocco, may be considered under two grand divisions, **SOUDAN** on the S. and **SAHARA** on the N. *Soudan*, as we are informed by Jackson, is the name given by the Moors to the immense tract lying between the *Jibbel Kumra*, or *Mountains of the Moon*,* on the S. and the Desert on the N.

SOUDAN. This region may be considered as reaching from N. to S. on the coast from the *Mesurada*, to several degrees N. of the *Senegal*, the exact southern limit of the Desert, on the coast, not being known. Both the *Desert* and the chain of *Jibbel Kumra* reach eastward across the continent. It is probable that *Soudan* will be found to do the same. Park explored the western part of this extensive tract, descending the Niger, as far as *Sillas*, a village of Bambarra, in about lat. 15° N. and 1° 30' W. He found it throughout fertile, well watered, thickly peopled, and divided into numerous kingdoms. Jackson, from information ob-

* Although the country between the *Mesurada* and *Rio Grande* seems hardly within the limits of *Soudan* here set ; yet, as the *Jibbel Kumra* are believed not to extend to the coast, (their western termination not being known) and as the inhabitants in this tract differ so materially from those of Guinea, and resemble in many respects those of *Soudan*, we have concluded to comprise it in our account of the latter.

tained of the Moorish traders to Tombuctoo, tells us that the Niger runs eastward to the Nile, and that the country through which it flows, continues of the same description. Horneman communicates the same information. The petty kingdoms lying W. of the sources of the Nile, *Dar Baghermi*, *Dar Bergoo*, and *Dar Fur*, are probably a continuation of *Soudan*, which apparently widens towards the E. and *Sennaar* and *Abyssinia* are in that case its eastern termination.

The *Senegal*, the *Gambia*, the *Grande*, and the *Mesurada*, are the great rivers of the western coast; and the *Niger* of the interior. The *Senegal* is formed by two branches. The *Kokoro* rises, according to the map of Park, in the mountains of *Manding*, and pursues a N. W. course of 300 miles. The *Bafing* heads in the chain of *Jibbel Kumra*, and pursues a more northerly course of 350 miles, joining the other in about lat. 14, N. and 9, W. The united stream, called the *Senegal*, pursues the course of the former, and, about 150 miles below, receives the *Famele* from the last mentioned chain, which heads near the *Gambia*. Its course is thence N. W. and W. almost to the shore of the ocean, parallel with which it runs southward, from 80 to 100 miles, emptying in about lat. 16, N. Its whole length must exceed 1000 miles. The quantity of water depends on the season.

The *Gambia* heads in the same chain, and runs N. W. and W. about 700 miles, emptying in about lat. 13 30, N. Cape Verd is about equidistant between the two rivers.

Of the *Grande*, we can only say that it is less than the *Gambia*, and empties in about lat. 11, S. and of the *Mesurada*, that it runs S. W. and is said to rise in the *Jibbel Kumra*.

Of the inhabitants of this tract we may remark here generally, that they are of two great classes, *Negroes* and *Moors*. The negroes are the most numerous. Their kingdoms occupy the whole of the coast, and the southern division of the interior, perhaps about two thirds of the breadth, from the Desert to the *Jibbel Kumra*. A few negroes are in the Moorish division. They are all of a much lighter color than the negroes of Guinea. Park supposes that at least two thirds of the population of the negro division are *slaves*. Great numbers of the negroes are Mahometans; the rest are Pagans. The Moorish kingdoms occupy the northern division, but great numbers of the Moors are scattered over the negro kingdoms. The Moors are all zealous Mahometans.

SOUTHERN FOULAHS. These occupy a great extent of country between the *Mesurada*, the *Rio Grande*, and the Mountains of the Moon. Their capital is *Teembo*. It is said they can bring 16,000 cavalry into the field. Many of them are Mahometans, though they border E. and S. E. on many Pagan nations, with whom they have carried on incessant wars merely for slaves. They have a very dark complexion, but are not blacks.

SIERRA LEONE, where the English have a colony, and an important mission, under the direction of the *African institution*, is near the middle of the country of the *Southern Foulahs*. Some

extend its limits from the Grain Coast on the S. E. to Cape Verga or Vega on the N. W.; that is, between 7 and 10 N. lat. Others confine the country between cape Verga and cape Tagrin. In the open and plain parts, the heat of the sun, before any breeze arises, is almost intolerable; but as a refreshing gale constantly springs up about noon, it renders the country supportable. The whole tract, on each side the river, is fruitful in rice and millet, which is the chief sustenance of the inhabitants.

The *Sierra Leone* river, which gives name to this country, has not been traced to its source. Its mouth, in lon. 12° 30' W. lat. & 15° N. is 9 miles wide. In 1791, an act of parliament was obtained, incorporating a company, called the Sierra Leone Company, for the purpose of cultivating W. India and other tropical productions, on the banks of this river. The first settlers amounted to 460; 400 were blacks, 60 white women of lewd conduct; they were afterwards reduced to 276. The second embarkation in 1792, consisted of 1200 free blacks from Nova Scotia. The natives appeared to be extremely friendly, and a few, in 1792, had come to work for the colony. On the setting in of the rains, about the latter end of May, the same year, sickness and mortality prevailed, occasioned chiefly by the insufficiency of the temporary habitations, which could not be completed before the rains set in; 35 white persons (of whom 14 were soldiers) and many of the blacks died of this sickness. The colonists were put into possession of small lots of land, and a new town, on a regular and extended scale, was begun. Beside the Nova Scotia blacks, a large party of the natives were at work for the company, and the experiments in sugar, cotton, &c. appeared promising. The native chiefs and people continued to be friendly; and the company's schools were regularly attended by 300 children, among whom were some children of the natives. In Sept. 1794, a French squadron destroyed the settlement, and captured several of the company's ships; but from this disaster they have since recovered; and a factory was established in the Rio Pongos, in 1795, which is likely to become the means of a lucrative trade. Missionaries are settled, who also labor to spread the gospel among the neighboring tribes. Schools are established. In Nov. 1801, an unprovoked and unsuccessful attack was made on this settlement, stimulated by the Limmanys, a neighboring tribe of Africans. A second attack of the same nature and issue, and from the same tribe, was made the 11th of April, 1802.

Sierra Leone, or Lion Mountains, divide Nigritia from Guinea, and extend as far as Abyssinia. They were styled by the ancients the Mountains of God.

Sherbro is another English colony 100 miles S. E. of Sierra Leone.

FELLOOPS. The *Feloops* are a wild unsociable race, near the coast S. of the Gambia. They are fierce and unrelenting, but grateful, affectionate, and honest. They are employed in collecting honey in the woods, which they convert into wax. This they carry to Vmtein, a settlement two miles up a creek, which empties into the

Gambia from the S. about 60 miles from its mouth. They also carry thither rice, which grows plentifully in the country; also goats and poultry; and employ *Mandingo* brokers, who cheat them out of most of their profits. They speak a peculiar language.

Governor Ludlam gives the following account of the baneful effects of the slave trade, witnessed by himself, in the country on the banks of the river Sherbro, 100 miles S. of Sierra Leone: "Thus has this fertile country been rendered a desert, and its trade, once extensive, been almost annihilated. Some thousands of square miles are now without an inhabitant. In this extent is included the richest land on the Windward coast. No place equalled Boom in fertility. Finer sugar cane is not found in the West Indies, than grows wild in Bagroo. And as for the interior country behind the Sherbro, it must also be rich from the quantity of rice, and cotton cloth brought thence."*

MANDINGOES. These originated from *Manding*, on the head-waters of the *Kokoro*, and also on the *Niger*, near its source. They are now far the most numerous nation in the W. of Soudan. They commence on the coast at the mouth of the Gambia, bordering S. on the *Feloofs*, *Barra*, *Yani*, and *Woolli*, three kingdoms on both sides of the Gambia from its mouth eastward; *Tenda Neola*, and *Dentila*, districts on its N. side; *Satadoo*, *Konkodoo*, *Woradoo*, *Kulloo*, and *Gadou*, districts in the same parallels, between the *Faleme* and the *Kokoro*; *Manding* on the *Kokoro* and *Niger*; *Kaarta*, a large kingdom N. of *Manding*, and W. of *Bambarra*; and *Kasson*, a kingdom W. of *Kaarta*; are *Mandingo* territories. The Mandingoes also constitute the chief population of western *Bambarra*.

The men are well shaped, above the middle size, strong, and capable of enduring labor. The women are good natured, sprightly, and agreeable. They breakfast about daybreak, on gruel made of meal and water, acidified by the juice of the tamarind. At 2 P.M. they dine on a sort of hasty-pudding, with *Shea* butter. Supper, their principal repast, is seldom ready before midnight, and consists of *kouskous*, a prepartion of meal, with a small portion of animal food mixed with it. Their beverages are beer and mead. With a few diversities this is the mode of living of all the negro nations. Both sexes dress in cotton of their own manufacture. That of the men is a loose frock, with drawers reaching half down the leg, sandals on the feet, and white cotton caps on the heads. The women wrap two pieces of cotton round the waist, which hang down to the knees in lieu of a petticoat; and throw a third piece over the shoulders and bosom. This is the common dress of the Soudan tribes, the only diversities being found in the head-dress of the women. Like the other negroes, the Mandingoies live in huts consisting of a circular mud wall 4 feet high, on which is placed a conical roof of bamboo canes, thatched with grass. A hurdle of canes placed upon upright stakes 2 feet high, on which is spread a mat, or bullock's hide, serves for a bed. A

* Report 2d of the Committee of the African Institution, p. 14.

water jar, some earthen pots to cook in, a few wooden bowls and calabashes, and one or two low stools, compose the rest of their furniture. Polygamy is universal, and each wife has her own hut. All the huts of one family are enclosed by a hedge fence. Agriculture and pasturage are the favorite employments of the Mandingoës. These occupy them through the rainy season. In the dry season they catch fish in wicker baskets, or small cotton nets, and hunt birds and beasts. The women, at the same time, manufacture cotton cloth, coarse, but durable. One woman will make 8 or 9 garments a year. They die it a rich and permanent blue color. *Tanners* and *blacksmiths* are the only mechanics by profession. Their instruments of music are the *koonting*, a sort of guitar with 3 strings ; the *korro*, a large harp, with 18 strings ; the *simbing*, a small one with 7 ; the *balafou*, composed of 20 pieces of hard wood of different lengths, with shells of gourds hung underneath, to increase the sound ; the *tangtang*, a drum open at the lower end ; and the *tabala*, a war drum. They have singing men, both Pagans and Mahometans. The former are extemporeaneous poets, and are stationary : the latter are strollers. Both are much employed and respected.

Park describes the Mandingoës as gentle, cheerful, inquisitive, credulous, simple, and fond of flattery. They are prone to steal from strangers ; but are at the same time hospitable and kind. A lively natural affection subsists between the mothers and their children. The practice of truth is strongly inculcated in childhood. They have double names ; the last denoting the clan ; the first sometimes the family, but often the result of accident. Salutations are observed among all the negroes, when they meet. Circumcision is universal, and takes place at the age of puberty. The value of two slaves is the common price of a wife. If the father receives it, the girl must marry the lover, or always remain single. The authority of the husband over his wives is great, but the women are not generally treated with cruelty. They partake of all public diversions, and are little given to intrigue. Adultery, murder, and witchcraft are the crimes, that are punished with slavery. The Pagan negroes always offer a short prayer to God, at the appearance of the new moon, and this is their only worship. The belief of one God, and of a future state of rewards and punishments, is universal. They rarely survive 55 or 60 years, and are gray and wrinkled at 40.

BARRA is the kingdom at the mouth of the Gambia on both sides, reaching up about 180 miles. The necessaries of life are abundant, and the chief trade is in salt, which they carry up the river a great distance, and bring back maize, cottons, ivory, and a little gold dust. A duty of near £20 sterling is collected for the king, by an officer stationed at *Jillifrey*, a town on the N. bank, on every ship, great or small, that enters the river.

YANI lies E. of Barra, reaching about 100 miles up, on both sides of the Gambia. *Pisania* is a well known English fort in this kingdom, on the N. bank.

WOOLI, E. of Yani, reaching about as far along the Gambia,
VOL. II.

has *Foota Torra* N. and *Bondou* N. E. The chief products are cotton, tobacco, maize, and vegetables. *Medina*, the capital, contains about 1000 houses, has a high wall built of clay, and an outward fence of pointed stakes.

Tenda, *Neola*, *Dentila*, *Satadoo*, *Konkodoo*, *Worodoo*, *Kulloo*, and *Gadoo*, are Mandingo districts, the inhabitants of which appear to be subject to no monarch, and to have no government, but that of their respective towns. A considerable part of this tract is a wilderness, on which the *Jallonkas* from the S. have encroached.

MANDING is a sort of oligarchy, each town has a particular chief, called a *Mansa*; and, in case of invasion, the supreme power is lodged in an assembly of the whole. *Fooladoo* lies N. W. of Manding, and both bound *Kaarta* on the S.

KAARTA a kingdom of considerable extent; having *Bambarra* on the E. and *Ludamar*, a Moorish kingdom, on the N. *Kemmoo* its capital is in the S. W.

KASSON lies N. W. of *Foolado*, W. of *Kaarta*, and bounds N. on the Moors. *Kooniakary* is the capital.

FOOTA JALLO. This is an extensive kingdom of the southern Foulahs, lying S. of *Neola*, and *Dentila*.

JALLONKADS. The country of this nation lies E. of *Foota Jallo*, and S. of the districts of *Satadoo*, *Konkodoo*, *Worodoo*, *Kulloo*, *Gadoo*, and *Manding*; and is called *Jallonkadoo*, reaching S. to the Mountains of the Moon. *Jallonkadoo* is divided into several petty kingdoms. Their language has some affinity to the Mandingo.

WASSELLA. This bounds N. on the eastern part of *Manding*, and W. on *Jallonkadoo*.

KONG. This is probably the most extensive and powerful kingdom of western Soudan. It has *Wassela* on the W. and *Bambarra* on the N.; and reaches eastward a great distance along the Mountains of the Moon. It has not been explored.

BAMBARRA. In the S. W. *Bambarra* commences on the Niger, at *Bammakoo*, and reaches down that river, on the N. bank, to *Moorzan* about 300 miles, and, if we include its tributary kingdom *Masina*, to lake *Dibbie* about 400. On the S. bank it reaches also to lake *Dibbie*. Below *Sego* it is narrow; unless we include *Masina*. Above, it is from 200 to 250 miles wide. *Wassela*, *Manding*, *Fooladoo*, *Kaarta*, and *Ludamar*, lie on the S. W. and W.; *Beero*, and *Masina*, a tributary kingdom to *Bambarra*, on the N.; *Gottoo* a powerful kingdom, *Baedoo*, and *Maniana*, on the E. and S. E. and *Kong*, on the S. The subjects of the king in the S. W. are of Mandingo origin, and speak a corrupted dialect of that tongue. Those in the E. speak a different language. Great numbers of Moors are scattered over the kingdom. They will probably in time, become the ruling nation.

Sego, the capital of the kingdom, is on Park's map, in lat. 14° 15' N. and in lon. 2° 30' W.; on both sides of the Niger. It consists, properly speaking, of 4 towns: *Sego Korro*, and *Sego Boo*, on the N. Bank; and *Sego Soo Korro*, and *Sego See Korro*, the king's residence, on the S. These are all surrounded with high mud walls; the streets are sufficiently broad; the houses are

built of clay, of a square form with flat roofs ; some of them have two stories, and many are whitewashed. Moorish mosques are seen in every quarter. The town contains about 30,000 inhabitants. The king derives a considerable revenue from the ferry-boats on the Niger, which are numerous, and are rowed by his slaves. The fare is 10 Kowrie shells an individual. The surrounding country is in a high state of cultivation.

JENNE, like *Masina*, in which it lies, belongs to the king of Bambarra. The inhabitants of *Masina*, are northern *Foulahs*, employ themselves chiefly in pasturage, and pay an annual tribute for their lands. *Jenne* stands on an island in the Niger, half way from *Manzon* to lake *Dibb  *. It is even larger than *Sego*. *Bam-mikoo*, on the S. W. frontier, is a considerable town on the river, carrying on a large trade in salt. *Maraboo* is about the same size, 50 miles below ; and *Koolikorro* is about as large 30 miles farther. *Yamina* and *Sansanding* are still larger, between this and *Sego*.

JINBALA. This kingdom occupies the large island in the Niger, below lake *Dibbie*. On Park's map, it is 100 miles long, and 50 broad. *Tombuctoo* lies N. and N. E. ; *Gotto* S. and S. E. The soil is remarkably fertile ; and the whole country so full of creeks and swamps, that the Moors have been baffled in every attempt to subdue it. The inhabitants are only negroes, and live in considerable affluence. The capital, *Jinbala*, is on the *Jin*, the N. arm of the Niger.

GOTTO. This is a powerful negro kingdom, bounding N. on *Jinbala* and *Tombuctoo*, from both of which, it is separated by the Niger. *Moosseedoo* is the capital.

BAEDOO. The king of Bambarra conquered *Baedoo* about 7 years before Park's journey, when it was tributary to him. It lies S. W. of *Gottoo*.

MANIANA. This lies S. W. of *Baedoo*, and bounds both on Bambarra and *Kong*. The inhabitants are cruel and ferocious, and are said to be cannibals. We know not to what nation the inhabitants of these four last kingdoms belong.

FOULAHs. This is, next to the Mandingoies, the most extensive negro race in the W. of Soudan. *Fooladoo* was their original country ; having the *Kokoro* on the S. W. ; *Manding* on the S. E. ; *Kaarta* on the N. E. ; and *Kasson* on the N. W. They are still inhabitants of that country, and also of *Brooko*, *Bambouk*, *Bondou*, *Foota Tarra*, and the country thence W. on the S. bank of the Senegal. They have already been mentioned as constituting the population of *Masina*, and are extensively dispersed over the kingdoms of *Kaarta* and *Bambarra*. Most of the negroes in the Moorish kingdoms are Foulahs. Many of them are settled as agriculturists in the Mandingo districts on the Gambia. They appear to be of a different race from the Southern *Foulahs*. Their complexion is tawney, and they have small pleasing features, and soft silky hair. The great body of them are Mahometans, and the *Koran* is both their statute book and Bible. They are reserved, not distinguished for their hospitality, but not intolerant. Schools

are kept by the Mahometan priests in all their villages. The children are taught to read the Koran, and discover great docility and submission. Most of the Foulahs speak Arabic; but they have a language of their own, abounding in liquids, though unpleasant in its enunciation. Most of them are engaged in agriculture and pasturage. They are commendably industrious, and discover great skill in the management of their cattle. They possess some excellent horses. A considerable number of the Foulahs are robbers.

FOOLADOO is long, from S. E. to N. W. and narrow. Park did not traverse it; nor *Brooko* or *Bambouk*, on the W. of it, which lie between the Senegal, on the N. and the Mandingo districts on the S.

BONDOU lies W. of Bambouk, and has Kajaaga on the N. Tenda on the S. and Wooli on the S. W. The soil is not surpassed in fertility. The inhabitants are wealthy and industrious. They sell large quantities of salt to the inhabitants of the interior, and the great body of the slaves from the E. pass through Bondou. Most of the merchants, however, are Mandingoies and Serawoolies. The customs are very heavy. *Fatteconda*, the capital, is a considerable town about 15 miles E. of the Faleme. The houses of the king are surrounded by a lofty mud wall, which converts the whole into a kind of citadel. The king's troops are well supplied with fire arms and ammunition.

Foota Torra is a considerable kingdom W. of Bondou, and N. of Wooli.

JALOFFS. The *Jaloffs* are an active, powerful, and warlike race, inhabiting an extensive tract of country, between the Foulahs of the Senegal N. *Foota Torra* E. the Mandingo states on the Gambia S. and the coast W. They are of a jet black. Their noses, however, are less flat, and their lips less prominent than those of most negroes. They are divided into several independent kingdoms, frequently at war with their neighbors, or each other. In their government, superstitions, and manners, they resemble the Mandingoies; but excel them in the manufacture of cotton cloth, spinning the wool to a finer thread, weaving it in a broader loom, and dying it of a better color. Their language is appropriate, copious, and significant.

SERAWOOLIES. These occupy only one independent kingdom, that of *Kajaaga*; but many of them are dispersed as merchants, brokers, and slave-drivers, over the whole country, particularly near the coast. They are of a jet black. Their language abounds in gutturals, and is less harmonious than the Foulah; but is very generally understood in *Kasson*, *Kaarta*, *Ludamar*, and the northern parts of *Bambarra*. In all these countries the Serawoolies are the chief traders. They are habitually a trading people, but always look upon *Kajaaga*, as their country. They trade with the British factories on the Gambia, are tolerably fair and honest, indefatigable in the pursuit of wealth, and derive considerable profit from the sale of salt and cottons in distant countries.

Kajaaga has Bondou on the S. W. Bambouk on the S. E. and is

separated by the Senegal from Kasson on the N. E. and Gedumah on the N. The king is absolute and powerful. The climate is peculiarly healthy, and the soil fertile. *Meana* is the capital. *Joag* is a frontier town of 2000 inhabitants, on the Senegal.

MOORS. The Moors possess a number of kingdoms between the desert on the N. and the negro kingdoms on the S. The Senegal divides them from the negroes, as far up as about opposite to Joag. Thence eastward, they bound S. on Kasson, Kaarta, Bambarra, Masina, and Jinbala.

They are divided into numerous tribes, or kingdoms. *Trasart* and *Il-braken*, lie N. E. of the Foulahs, on the Senegal; *Geduma*, N. of Kajaaga; *Jafnoo*, of Kasson; *Ludamar*, of Kaarta; *Bee-roo*, of Bambarra and Masina; *Tombuctoo*, of Jinbala and Gotto; and *Houssa*, still farther E.

The origin of these Moorish tribes is explained by John Leo, the African. Before the Arabian conquest, about A. D. 650, all the inhabitants of Africa, whether descended from Numidians, Phoenicians, Carthaginians, Romans, Vandals, or Goths, were comprehended under the general name of *Mauri*, or *Moors*. All these nations were converted to Mahommedism during the Arabian empire under the Caliphs. About this time many of the Numidian tribes, who led a wandering life in the desert, and supported themselves upon the produce of their cattle, retired southward across the Great Desert, to avoid the fury of the Arabians; and by one of these tribes, Leo says, that of *Zanhaga*, the negro nations on the Niger were discovered, and many of them conquered. There is reason to believe, says Park, that their dominion stretches from W. to E. across the continent, in a narrow belt, from the mouth of the Senegal to Abyssinia.

Their complexion resembles that of the mulattoes of the West Indies; but their features bespeak low cunning and cruelty, and their eyes have a staring wildness. Park conjectures that they are a mixture of the northern Moors, and the Negroes. Their dress resembles that of the negroes, except that they universally wear turbans of white cotton; and that their drawers, or small clothes, are much fuller and larger. Their houses are built of clay and stone. Many of them live in tents, and roam from place to place. The chief wealth of these consists of camels, cattle, and goats, and their chief business is pasturage. They are all extremely indolent, but rigid taskmasters to their slaves. Their country being nearer the Desert is far hotter and less fertile than that of the negroes. It is subject to a *sand wind* from the N. E. which is extremely distressing. They have fine horses, and are excellent horsemen. They pay scarcely any attention to agriculture, purchasing their corn, cotton, and other necessaries of the negroes, in exchange for salt, which they dig from the pits in the Desert. They manufacture cloth for their tents, and leather for saddles and bridles; also spears, knives, and pots; but sabres and fire arms are purchased of Europeans, in exchange for slaves.

They are all rigid Mahometans, bigotted, superstitious, and intolerant. All the males read and write. Their language is Ara-

bic. Their women are taught nothing, except voluptuousness and submission. Corpulency in their females is the first characteristic of beauty. They are extremely unkind to their slaves and to strangers. Park describes them as universally proud, ferocious, false, and treacherous.

Trasart and *Il-braken* are both formidable tribes. Those of *Gedumah* and *Jafnoo*, are less numerous, but equally warlike. Their chiefs, or kings, have absolute jurisdiction.

Ludamar bounds W. on *Jafnoo*, S. on *Kaarta*, S. E. for some distance on *Bambarra*, E. on *Beroo*, and N. on the Desert. *Jarra* is a town in *Ludamar*, of considerable extent, on the confines of *Kaarta*. The houses are of clay and stone intermixed. The majority of the inhabitants are negroes, who pay tribute to the Moors, rather than be exposed to their hostile incursions. *Benown* is the capital of the kingdom. *Deena* and *Sampika* are of about the same size as *Jarra*, and farther E.

Of *Beroo* we know nothing, but that it bounds the greater part both of *Bambarra* and *Masina*, on the N. and that its capital is *Walet*.

Tombuctoo, called by *Jackson*, *Timbuctoo*, extends on the N. bank of the *Niger*, from *Beroo* to *Houssa*. The Moors are the ruling nation, but great numbers of the inhabitants are slaves. The king is powerful, and has a magnificent court. *Tombuctoo*, his capital, is situated on a plain, 130 miles E. of *Beroo*, and 12 miles N. of the *Niger*; in about lon. 130, E. and 90 miles from the confines of the desert. It is a very large town; the Moors told *Jackson*, about 12 miles in circumference. The houses are spacious, and of a square form; of one story, with a hollow open square in the centre. The government of the town is in the hands of a divan of 12 *Alema*, men learned in the *Koran*, appointed for 3 years. Its police is excellent. *Kobra* is its port on the *Niger*. The commerce of *Tombuctoo* is very important. The articles brought by the *Akkabaahs* from *Morocco* to the capital, are sent from *Kabra*, both up and down the *Niger*. A caravan goes also to *Fezzan*, and another to *Egypt*. The soil is generally fertile. Rice, millet, and maize, are extensively cultivated; wheat and barley also in the plains. Coffee and indigo grow wild. The cotton manufactures are superior. Great quantities of honey are annually collected.

Houssa. This kingdom lies E. of *Tombuctoo*, on both sides of the *Niger*. An extensive desert on the S. is said to separate it from *Gotto*. *Houssa*, the city, lies about 60 miles from the N. bank of the river, and is, according to *Park*, 11 days journey, or 330 miles below *Kabra*. It is said to be even larger than *Tombuctoo*, and is likewise a great commercial emporium. Horne-man was informed, that the kingdom of *Houssa* reached eastward to the limits of *Bourno*, beyond lon. 15, E. and that it comprehended several large provinces, of which *Kashna* and *Gana*, or *Kano*, were the most eastern. *Kashna*, the capital of the first is said to be far the largest town in the country, and in the interior of Africa. The *Houssians* are chiefly negroes.

Bournou. This is a very extensive country, placed by Rennel

E. of Houssa, beyond which lie the kingdoms of Dar Bagherme and Dar Fur. The inhabitants of all these are mere negroes.

SAHARA. We know of no extensive *oases* in the western part of the Sahara ; but in the eastern part there are several very interesting to the geographer and historian.

TUARICK. Horneman tells us, that that part of the Desert, lying N. of Houssa, and N. W. of Bournou, is occupied by the *Tuarick*, a very extensive nation, that roams over the whole desert, even to Morocco. They are divided into many different tribes, who all speak the same language. Most of those near Soudan, as the *Kolluvian Tuarick*, are very dark, and some quite black, but they have no other resemblance to negroes. Those more to the N. and W. are yellow, like the Arabs. All the Tuarick seen by Horneman, were thin, and rather tall, with a swift, firm walk, a stern look, and a warlike demeanor. They discover strong natural powers of mind. Their character is much esteemed. Their clothing consists of wide, dark blue breeches, a short narrow blue shirt, with wide sleeves, over this a larger shirt, or frock, and a black cloth on the head. They are chiefly Mahometans, but the *Tagama Tuarick*, on the borders of Tombuctoo, are whites, and are Pagans. They always carry in their hands a small lance, about 5 feet long. Over the frock a long sword hangs from the shoulder. The travelling merchants alone have fire arms. They carry on a commerce between Soudan, Fezzan, and Gadamis, near Tripoli. Most of the Tuarick lead a wandering life. Some live in the small *oases* in the Desert.

TIBBOOS. These are an extensive nation living E. of the *Tuarick*, in the Desert.

FEZZAN. This country limits the *Tuarick* on the N. E. Horneman says that it is of an oval shape, about 300 miles from N. to S. and 200 from E. to W. Rennel lays it down between lon. 14 and 17, E. and about 150 miles S. from the shore of the Greater Syrtis. Arabs, nominally dependent on Tibet, border it on the N.; the country of the *Tibboos* on the E. and S. E.; that of the nomadic *Tuaricks* on the S. and S. W.; and Arabs on the W. The kingdom contains 101 towns and villages. The religion is the Mahometan. It is governed by a sultan, a descendant from the family of the *Sherreefes*. The tradition is, that the ancestors of the reigning prince, coming from western Africa, invaded and conquered Fezzan, about 500 years since. The sultan is absolute ; but holds his dominions of the Bashaw of Tripoli, to whom he pays 4000 dollars as a yearly tribute. An officer of the bashaw comes annually to Mourzouk to receive this sum, or its value in gold, senna, or slaves. The throne is hereditary in one family. The eldest prince of the royal family always succeeds. The dignity of chief judge, or *cadi*, is hereditary in one family. The *cadi* is also chief priest. The sultan gives public audience to his subjects daily. His official attendants are the *kaledyma*, or first minister, the *keijumma*, or second minister, the general of his troops, and a number of black and white slaves. The chief influence, in 1800, was in the hands of the *Mamelukes*. Horneman

estimates the population at 75,000. The revenue arises from taxes on gardens and cultivated lands ; from arbitrary fines and requisitions ; from duties on foreign trade, paid by the several caravans ; and from predatory excursions. The expenditure consists chiefly in the maintenance of the sultan, his court, and palace. The cadi and each one of the royal family has a district assigned for his support.

In the northern part of the country the complexion is like that of the Arabs. In the S. it is mixed. The indigenous Fezzans are small, of a deep brown color, short black hair, with regular features, and noses like Europeans. The mien, walk, and every motion and gesture, denote a want of energy either of body or mind. The only tradesmen are shoemakers and smiths. The women fabricate coarse woollens, called *abbes*. The dress consists of a shirt or frock, made of coarse linen, or cotton, brought from Cairo, and of the *abbe*. The middling classes also wear frocks of the blue cloth of Soudan. The rich dress in the Tripolitan habit. The women wear many ornaments. They are fond of dancing, and every amusement ; and are wanton and licentious. The men are addicted to drunkenness, contracted by drinking the fresh juice of the date. Singing girls are common. The houses are miserably built of stones, or of bricks, composed of a calcareous earth, mixed with clay, and dried in the sun. As to diet, no people are more abstemious. *Mourzouk*, the capital, is in about lat. 27° 23' N. and in lon. 15° 40' E. 420 miles in a direct line S. S. E. of Tripoli. *Zeula* lies about 70 miles E. by N. of *Mourzouk*. The commerce of Fezzan is considerable. From October to February *Mourzouk* is the great emporium for the caravans from Cairo, Tripoli, Gadamis, *Bengasi*, a town on the N. coast, Soudan, and various others. The inhabitants of *Augila* carry on the trade from Cairo ; those of *Sockna*, that of Tripoli ; and the *Kolluvian Tuarick*, that of Soudan. Slaves, ostrich feathers, ribette, tiger skins, and gold come from Soudan ; copper from Bornou ; silks, *melayes*, (striped blue and white calicoes,) woollens, glass, mock coral, beads, and East India goods from Cairo ; tobacco, snuff, and sundry Turkish wares from Bengasi ; paper, mock coral, firearms, sabres, knives, and red worsted caps are brought from Tripoli, and Gadamis ; butter, oil, fat, and corn by the smaller Tuarick and Arab caravans from the W. and senna, ostrich feathers, and camels by those from the S.

The climate is at no season temperate or agreeable. In summer, the heat is intense, and when the wind blows from the S. scarcely supportable. Through the winter, a bleak, chilling, damp N. wind prevails. Thunder storms are not frequent ; but tempests and whirlwinds are common, both from the S. and N. Syphilis, hemorrhoids, and fever and ague are the common diseases. Dates are the natural and staple produce. Senna is grown in the W. Pot-herbs and vegetables are plentiful. Wheat and barley are suited to the soil and climate. Horned cattle are found only in the most fertile districts. Goats are the common domestic animal. Sheep are bred in the S. Horses are few ; asses are the

ordinary beasts of burden. Camels are very dear, and are owned only by the chief people or richer merchants. All these animals are fed on dates.

GADEMIS. This is an oasis, near the S. W. corner of Tripoli. We have no information respecting it.

AUGILA. This small, but celebrated territory, lies nearly midway between Egypt and Fezzan. It is about 165 miles from the coast, in lat. 29° 30' N. and lon. 23° E.; and is 450 miles, in a direct line E. N. E. of Mourzouk. It is an oasis, flat, well watered, fertile, and surrounded by arid deserts, either sandy or rocky. Its dates are celebrated. These and its gardens constitute the chief culture. There are 3 towns, *Augila*, *Mojabra*, and *Meledila*: the two last near together, and both 4 hours E. from the first. *Augila*, well known in the time of Herodotus, covers a space of one mile in circumference. It is badly built. The streets are narrow and dirty. The houses are of one story, of limestone, with an open hollow square in the centre. The apartments are dark. The public buildings are mean and wretched. *Mojabra* is smaller, but proportionally more populous. The inhabitants are chiefly merchants. Those of *Meledila* are employed in the culture of the ground. The men employed in trade, generally keep three houses; one at *Karduffi*, near Cairo, one at *Mojabra*, and one at *Zuila* or *Mourzouk*. Many have a wife and family at each establishment. The women manufacture abbes. Wheat is imported by the Arabs from *Bengasi*. The inhabitants can speak Arabic, but their vulgar tongue is that of *Siwah*, the same with that of all the *Tuarick*. *Augila* is governed by a vicegerent for the bashaw of Tripoli.

SIWAH. *Siwah* lies 210 miles a little S. of E. of Augila. The route of the caravans is an almost straight course from one to the other, along the foot of the *Mountains of Gerdoba*. It is 150 miles from the Mediterranean, and 260 W. S. W. of Cairo. The road to Cairo crosses the Nation valley. The route of the caravan to Cairo, is about 50 miles N. E.; and the rest of the way in an E. by N. course, along the foot of the *Hills of Mogurra*.

Siwah is a small independent state. It acknowledges the grand seignior paramount, but pays him no tribute. The territory is of considerable extent; its principal and most fruitful district is a well watered valley, 50 miles in circuit, hemmed in by steep and barren rocks. It is supposed, with great probability, to have been the ancient *Oasis of Ammon*; and a pile of ruins on the W. of the capital are said to be the remains of the celebrated temple of Jupiter Ammon. As the language of the present Siawahans is *Tuarick*, they are believed to be of Tuarick origin. They are all Mohammedans. The government of the territory is in the hands of 32 sheikhs, who sit in a general council. Justice is administered according to ancient usage. *Siwah* the capital is nearly in the centre of the valley. It is built upon a round mass of rock. The houses might be taken for caves. The streets are so narrow, that the houses almost touch each other. Many stand on the declivity of the rock. It resembles a bee hive in its shape, and in the buzz

of its streets. At the foot of the rock are erected stables for the camels, horses and asses, which cannot ascend to the town above. Five villages surround the town, at one or two miles distance. The dress of the men consists of a white cotton shirt and breeches; a *melaye*, folded round the person, and thrown over the left shoulder; and a red worsted, or cotton cap. The women wear wide blue shifts, reaching to the ancles, and a *melaye* wrapped round the head, and falling over the body, like a cloak. They also wear many ornaments. The Siwhans are great thieves. Many of them are rich. Each individual has one or more gardens, and these it is his whole business to water and cultivate. The soil is a sandy loam, yielding corn, oil, and vegetables, but the chief produce is dates. These are all kept in a public store-house. N. W. of the capital there is a stratum of salt, extending a full mile, and near it salt is found on the surface, lying in clods, or small lumps.

AFRICAN ISLANDS.

IN our account of these we will begin with Madagascar, the only one of any considerable size. The smaller African Islands shall be considered in a geographical order.

MADAGASCAR.

THIS noble island, the largest in the world, except New Holland and Borneo, lies between lat. 11° 22' and 25° 42' S. lon. 41° 14' to 48° 14' E. Its length, from Cape St. Mary to Cape Natal, is about 980 miles, and its mean breadth is about 250. It lies in the Indian ocean; and the channel of Mozambique, 90 leagues across, bounds it on the W. and separates it from the continent of Africa. It is divided into 28 provinces.

Marco Polo, in the 13th century, describes it under its present name; having been indebted for his knowledge to the Arabs. Three races among the inhabitants are evident; that of Qafe Ibrahim, or Abraham; these practise circumcision, and the names of Isaac, Reuben and Jacob, are familiar with them. The second race is that of Qaferamini, who have, it is supposed, been here six centuries. The third race is of the Arabian extraction, and more modern.

This island was discovered by the Portuguese in 1506. The French took possession of it in 1641, but were driven out in 1652. A considerable settlement was made here again under the French government from 1772 to 1776, by the Baron Beneyowski. He erected buildings, raised fortifications, dug canals, opened roads, exerted himself to civilize the people. He fell here worthy a

better fate. On the 18th of February, 1811, this island surrendered to the British. The effect of this conquest, it is expected, will be the freedom of these seas from the French flag, and the security to the British of an unmolested traffic with this fruitful and important island.

The population of the island is reckoned, by Rochon, at 4,000,000 souls. The language of all these islanders is nearly the same.

The inhabitants believe in a Supreme Being, whom they call Zanhare, i. e. Creator of all things. They have no temples, no idols, no priests; but make sacrifices of sheep and oxen. They believe the soul immortal, but suppose the wicked and good rewarded in this life. They are a friendly, intelligent, excellent people, possessing a quick sense of honor and gratitude, far less mindful of injuries done themselves, than of those offered their family. Some are of a deep black, and have woolly hair; others are tawney, and others copper-colored; but most of an olive. They are all portly in their persons, and rise above the middle stature. Writing is not unknown. They have some historical books in their own languages; but their men of learning, whom they call *Ombiasses*, use only the Arabic character. That language has made some progress in the N. of the island. Their hospitality is worthy of notice and imitation. The traveller, though a stranger, enters the cottage, sits down with the family, and partakes of their repast. This custom is general.

The oaths, which these islanders are not known to violate, are taken in a solemn, impressive manner. The most sacred is the oath of blood. The left breast of the person engaging is opened with a razor, from which the other sucks a drop of blood, wishing anathemas on him, who shall violate, and blessings on him, who shall keep the oath. A barbarous custom has prevailed here of destroying those infants, who have any natural defect, or are born on those days, they call unlucky.

They have dancers and comedians to amuse them; and physicians to visit them when sick. These amiable people are torn from their country, their families, their parents, their children, their lovers, and sold in thousands, in the French colonies, and more cruelly treated than beasts of burden. Under the blazing sun of Bourbon, or the isle of France, the wretch toils, almost naked, with an iron collar fastened round the neck, from which rise plates of iron, forming a mask and head piece; before the mouth is a round plate of iron, in which are small holes to emit the breath; there is a place for the nose; a flat piece of iron passes through the mouth, as a bit in the horse's mouth. The skin is soon worn from the mouth, nose, face and chin. This, with the heat of the iron in a hot day, renders the torment intolerable. Their punishments are insupportable, and they gladly meet death. They often hang or poison themselves, or rush into the open ocean in a little boat.

All the artisans of Europe are not found here; but they have manufactures of iron and steel. They are ingenious goldsmiths, potters, joiners, carpenters, rope-makers and weavers. Their

Jinens are woven by women ; they are very fine, and beautifully colored.

The climate of Madagascar is healthy ; the heat is not excessive, being in some parts tempered by land breezes, from sun-setting, till 10 or 11 o'clock in the morning. They live in towns and villages. The towns are surrounded by a ditch and pallisadoes, guarded by 10 and 20 soldiers. The houses of private people consist of a convenient cottage, surrounded by smaller ones for their wives and slaves. They are of wood covered with leaves or straw. The houses of the wealthy are spacious and divided into several apartments. The princes have buildings of taste and beauty.

This island is watered by a great number of considerable rivers, which form at their mouths many bays and gulfs, in which are found good roads and harbors. *Foulepointe* is the port most frequented on the N. coast. The harbor is surrounded by a reef of rocks, which defend the vessel from the force of the waves. The shores are bold, and the depth 23 feet, at low water.

The country produces oxen, sheep, goats, and cotton in abundance. Ebony, gum guttae, cucumbers, peas, beans, barley, rice, and citrons, are plenty. Cardaman plants, banana, and orange trees flourish. Rock crystals, copper, silver, gold, iron, and precious stones are found here. A great variety of ornamental plants, of fruit trees, and valuable timber, grow on this island.

SMALLER AFRICAN ISLANDS.

PORTO SANTO. This is a small island, about 20 miles in compass, in lat. 32° 55', N. and 125 leagues W. of Cape Blanco ; discovered and possessed by the Portuguese. It has one good harbor, safe from all winds but the S. W. Here the India ships usually stop to refit, both going and returning. The island is inhabited by Portuguese, is very rich, and produces wheat and maize, cattle, wild boars, and rabbits. Dragon's blood, honey, wax, and fish, are exported.

MADEIRA. The form of Madeira is a triangle of 150 miles in circuit, lying in lat. 32° 30', N. and lon. 16° 50', W. 120 leagues W. of Cape Cantin. It is divided into two provinces. The Portuguese discovered it in 1431. The population is said to amount to 70,000. The forces are 150 infantry, and 2000 militia. *Funchal*, the capital, is in a valley, on the S. coast. The harbor is defended by several batteries, and a castle. The town is divided into 6 parishes, and contains 6 convents, as many churches, and about 15,000 inhabitants, consisting of Portuguese, French, English, Irish, mulattoes, and blacks. The streets are straight, and the houses neat. The windows are sashed with lathwork. The town is the see of a bishop, and the residence of the governor. The principal merchants are English and Irish catholics, though the island belongs to Portugal. The climate is agreeable, and the soil very fertile. The chief exports are Madeira wine, 20,000

hogsheads, and sweet meats. Every species of tropical fruit grows to perfection.

CANARIES. There is a group of 13 islands lying off Cape Non, or Nun, between lat. 27° 15', and 29° 50', N. and between 13° and 17° 30', W. Six are small and uninhabited; *Graciosa*, *Rocca*, *Allegranza*, *Sta. Clara*, *Inferno*, and *Lobos*. Some also consider the *Salvages*, a cluster of rocks to the N. W. as in the group. The seven large islands are *Lancerotta*, *Forteventura*, *Grand Canary*, *Teneriffe*, *Gomera*, *Ferro*, and *Palma*. They are thought to be the same with the *Fortunate Islands* of the ancients. They were imperfectly known to the Spaniards about the year 1300. John de Bethencourt conquered and took possession of them for Henry III. of Castile, about 1404. With the king's consent he soon after assumed the title of King of the Canaries. They still belong to Spain. The natives were called *Guanches*. The race is nearly extinct. They were stout, robust, of a tawney complexion, with large flat noses, lively, cunning, brave, and addicted to war. They were polygamists and idolaters. The religion is the Catholic. The bishop has a revenue of £10,000, and is suffragan to the archbishop of Seville. A tribunal of the inquisition is established at Palma, the capital. The government is vested in a governor and royal audience. The audience sit at *Palma*, the capital of Grand Canary. The population of the whole group is stated at 196,500, distributed as follows:

Teneriffe,	100,000	Lancerotta,	8,000
Grand Canary,	40,000	Comera,	7,000
Palma,	30,000	Ferro,	1,500.
Forteventura,	10,000		

These islands yield a revenue to the crown of about £60,000. sterling. The inhabitants are chiefly Spaniards. Most of them are poor, and are tenants. Bread is eaten only by the rich. The poorer sort subsist on *goffio*, a parched grain, ground by a little hand-mill. The commerce with England, Spain, and Spanish America, is important. The exports to Spanish South America, in 1788, amounted to £88,255 sterling, and the imports to £71,586. Wine is chiefly exported from the islands of Teneriffe and Palma. Tropical fruits are raised in great abundance.

The climate is temperate and mild. The soil is generally fertile. The articles of culture are the vine, sugar-cane, cotton, wheat, barley, and rice. All the islands are well supplied with cattle.

Forteventura, 50 miles long, and from 8 to 24 broad, is 40 leagues W. from Cape Non. It is fertile, well watered, and productive, abounding in goats. *La Villa*, in the centre, and *Olivia*, in the N. are the largest towns.

Lancerotta lies directly N. of the preceding, and is 30 miles by S. The capital of the same name has 100 houses. Its vallies are fertile, and it abounds in goats.

Grand Canary lies S. S. W. of Forteventura, and 100 miles N. W. by N. of Cape Bojador, and is 100 miles in compass. *Palma*, the capital, is on the S. W. side, at a small distance from the sea,

and is about a league in circuit. It contains 12,000 inhabitants. The houses are of one story, with flat roofs, but are well built. Here are 4 convents. The soil is a rich mould, yielding two harvests. Filtering stones are among the exports.

TENERIFFE is 70 miles west of Grand Canary, and 160 N. W. of Cape Bojador. Its length is 70 miles, and its mean breadth 22. Santa Cruz, the capital, on the S. E. has a good harbor, and is a handsome, populous town. The governor resides here. No soil is more fertile than that of this island. About 40,000 pipes of wine are made annually. The climate is remarkably healthy. The celebrated Peake of Teneriffe is a well known land-mark, visible more than 120 miles.

GOMERA lies W. of Teneriffe, is 20 miles long, and 10 broad, and has a capital of the same name, on the E. coast, with a good harbor. It is fertile and well cultivated, producing great quantities of silk.

FERRO, or HIERRO, the most western of the Canaries, and the most western land known to the ancients, constituted, for several centuries, the only first meridian of geographers. It is about 6 leagues in circuit, and not very fertile. The longitude of its west coast is 17 46, W.

PALMA, N. by E. of Ferro, is 20 leagues in circuit. It is very fertile and productive, and has a capital of its own name.

CAPE VERD ISLANDS. These are a cluster of islands, 130 leagues W of Cape Verd, between lat. 16 and 18, N. The principal ones are St. Anthony, St. Vincent, St. Nicholas, Bonavista, and St. Jago. They have long belonged to the Portuguese. The inhabitants of all are said to amount to 100,000. By long residence, and by intermixture, they have become nearly of the negro complexion and features. The manufactures of leather and salt form the principal riches. The soil is indifferent. Tropical fruits abound. The first modern who visited them, was Antonio Nolli, a Genoese, in 1449.

GOREE. This is a little island, two miles in circuit, close to the coast, S. of Cape Verd. The Dutch planted it in 1617. The French drove them out in 1677, and were lately driven out by the English.

BISSAO. This island is 80 miles in circuit, and is close to the coast, in lat. 11 30, just N. of Rio Grande. It is the only possession of the Portuguese near the coast, between Cape Verd and the Coast of Congo.

BISSAGOS. These form a little archipelago, lying along the coast, near the mouth of Rio Grande.

FERNANDO PO. This isle is about 30 leagues in circuit, in lat. 3 20, N. and lon. 10 45, E. near the coast of Benin. It belongs to Spain, is high, has a fertile soil, and produces manioc, sugar, rice, fruits, and tobacco.

PRINCE'S ISLAND. This lies directly S. of the former, in lat. 1 30, N. and is 20 leagues in circuit. The town on the N. coast has a good harbor, and contains 200 houses. The soil is good, and the produce like that of Fernando Po. It belongs to Spain.

ST. THOMAS. St. Thomas is about 20 leagues in circuit, and lies a little W. of S. from Prince's Island, directly under the equator, and about 50 leagues N. W. by W. from Cape Lopez. It was discovered and settled by the Portuguese, in 1460, and made a sort of Botany Bay for the heroes of the Lisbon Old Bailey. These are now amalgamated with the negroes.

ANNOBON. This is a high, mountainous, and fertile island, about 6 leagues in circuit, in lat. 1° 45', S. 80 leagues from Cape Lopez. It was settled by the Portuguese, and is said now to belong to Spain.

ST. MATTHEW. The Portuguese discovered it in 1516, and soon after settled it. It lies in lat. 1° 45', S.

ASCENSION. Lat. 7° 56' 30", S. lon. 14° 22' 31", W. It was discovered in 1501, is 10 miles long from N. W. to S. E. and 5 or 6 broad. It is barren and desolate, but abounds with turtle.

ST. HELENA. This is a beautiful island, 20 miles in circumference, belonging to the English East India Company. It has some high mountains, particularly one called Diana's Peak, which is covered with wood to the very top. There are other hills also, which bear evident marks of a volcanic origin; some have huge rocks of lava, and a kind of half vitrified flags. Every valley is watered by a rivulet, and the island can support 3000 head of its small cattle. The number of inhabitants does not exceed 2000, including near 500 soldiers and 600 slaves, who are supplied with all sorts of manufactures by the company's ships, in return for refreshments. The town is small, situated in a valley, at the bottom of a bay on the south side of the island, between two steep dreary mountains; has a church, and is well defended by forts and batteries. It lies between the continents of Africa and South America, about 1200 miles west of the former, and 1800 east of the latter, lon. 5° 49', west, lat. 15° 55', south.

The Company's affairs are here managed by a governor, deputy governor, and store-keeper, who have standing salaries allowed by the Company, besides a public table well furnished, to which all commanders, masters of ships, and principal passengers are welcome.

Saxemberg, Tristran de Cunha, Diego, and Gough's Island, are small islands to the W. of the Cape of Good Hope. *Prince Edward's and Desert Islands*, lie to the S. E. of that Cape. The *Isle of Desolation*, called by the French, *Kerguelen's Land*, is about equidistant from Africa and New Holland.

BOURBON. The Portuguese discovered it in 1545, and called it *Mascarenhas*. The French took possession in 1642, and called it *Bourbon*. They have lately called it *Isle de Reunion*, and still later, *Bonaparte*. It is 60 miles long, and 40 broad, 370 miles E. from Madagascar. The island is difficult of access. *St. Denis* is the principal port. It has lately been taken by the English. Its first inhabitants were pirates, who planted themselves here in 1657. The island has now, according to St. Pierre, 60,000 blacks, and 5,000 other inhabitants : lon. 55° 30", E. lat. 20° 52', S.

MAURITIUS. This island, 150 miles in circumference, lies E.

N. E. of Bourbon, and 400 miles E. of Madagascar, was discovered and settled by the Dutch, in 1598, and relinquished in 1710. The French took possession soon after, and retained it till 1810, when it was taken by the English. The climate is healthy; but the soil not very fertile. There are many mountains, some of which are so high, that their tops are covered with snow: They produce the best ebony in the world. The vallies are well watered with rivers, and are made very productive of cultivation, of which indigo is the principal object. The town and harbor are called Port Louis, and are strongly fortified; but in the hurricane months, the harbor cannot afford shelter for more than eight vessels. Here are large store houses, and every thing necessary for the equipment of fleets.

The number of inhabitants on the island, exclusive of the military, is 8,000 whites, and 12,000 blacks. These black slaves cultivate the soil, do all the drudgery, and are treated in the most cruel manner. In desperation, they often hang or drown themselves. More frequently, they fly to the woods, where they are hunted and shot, like beasts, by parties of pleasure formed for the purpose!! Lon. 57 28 E. lat. 20 9 S.*

• COMORA ISLANDS, a cluster of islands in the Indian ocean, between the coast of Zanguebar and the N. part of the island of Madagascar. They are 4 in number, viz. Johanna, Mayotta, Mohilla, and Comora, which last is 6 leagues long and 3 wide, and gives its name to the group. It has no safe harbors. Its high mountains are richly covered with verdure and fruit trees, and give rise to numerous fertilizing streams, on which are many beautiful cascades. The vallies between the mountains are extensive, and in richness and beauty are exceeded by none in the world. These islands produce rice, peas, yams, Indian corn, purslain, cocoa-nuts, plantains, oranges, lemons, citrons, limes, pine apples, cucumbers, tamarinds, sugar canes and honey. Their animals are buffaloes, goats, tortoises, camelions, hens, and a great variety of birds, many of which are not known in Europe. Johanna, though not the largest, is yet in many respects the principal island. The Arabs are settled here, and exact tribute from the natives of this and the other islands. The Arabs, about 3000 in number, professing the Mahometan religion, are settled together in a walled town on the S. E. part of the island. The town, which is the residence of the king of all the isles, contains about 900 houses, one story of 15 or 20 feet high, and thatched with cabbage-tree leaves. The town covers about 10 acres. A mosque of stone rises in its centre. The walls are about 6 feet high, and encompass the whole town, leaving but one place of entrance, and are mounted with 18 cannon, taken from the wreck of a French ship; but they are of no use for defence, as the inhabitants are without ammunition, and ignorant of the manner of managing them. The streets are dirty, and so narrow as to admit but two persons abreast. The drink of the inhabitants is the milk of the cocoa-nut, from which they have

* St. Pierre,

the art of extracting an intoxicating liquor. From the sugar-canæs they extract molasses. The Arabs in the town are clothed, and in some degree civilized ; but the aborigines, about 7000 in number, who inhabit the hills, and who are often at war with the Arabs, go naked, are of a dark complexion, and stupid. In the interior of the island is a lake, held sacred by the natives, in which are ducks, which are also venerated. All strangers, who visit this lake, are required to leave their guns 5 miles from it. The birds thus protected, are tame, and fearlessly approach those who visit them. The Arabs, though they dare not openly oppose, yet detest this superstition. The East India ships often touch here for refreshment. The Arabs, some of them, speak broken, but intelligible English—preserve the manners of Arabia, and are not so dark as the natives. These isles lie between 11 and 13 S. lat. and 44 and 47 E. lon.*

MONFIA, ZANZIBAR and PEMBA, lie along the coast of Zanguebar. The latter is governed by a king, who pays tribute to the Portuguese, and who receives a tribute from the other two.

ZOCOTRA or SOCOTRA. This is a large island, 25 leagues from Cape Guardefan, and 80 from Arabia. It is 75 miles in length, from E. to W. and 50 broad. It has a fine bold shore, and many excellent harbors. It is fertile and populous ; and is governed by a prince who is tributary to the Sheikh of *Keschin*, a town of Hadramaut in Arabia. The inhabitants are of Arabian descent, and are Mahometans. The island is very productive.

* Capt. Ham, Walker, Grose.

THE END.

CHRONOLOGICAL TABLE

OF REMARKABLE

EVENTS, DISCOVERIES AND INVENTIONS:

COMPREHENDING, IN ONE VIEW,

THE ANALYSIS OR OUTLINES OF GENERAL HISTORY,

FROM THE CREATION TO THE PRESENT TIME.

Ref. Christ.

- 4004 THE creation of the world, and of Adam and Eve.
3017 Enoch translated into heaven.
2348 The old world destroyed by a deluge, which continued 377 days.
2247 The tower of Babel is built about this time by Noah's posterity; upon which God miraculously confounds their language, and thus disperses them into different nations.
2254 Celestial observations are begun at Babylon, the city which first gave birth to learning and the sciences.
2188 Misraim, the son of Ham, founds the kingdom of Egypt, which lasted 1663 years, to the conquest of Cambyses.
2059 Ninus, the son of Belus, founds the kingdom of Assyria, which lasted above 1000 years.
1921 The covenant of God made with Abraham, when he leaves Haran to go into Canaan, which begins the 430 years of sojourning.
1897 The cities of Sodom and Gomorrah are destroyed for their wickedness by fire from heaven.
1822 Memnon the Egyptian invents the letters.
1655 Joseph dies in Egypt, which concludes the book of Genesis, containing a period of 2369 years.
1574 Aaron born; 1490, appointed by God first high priest of the Israelites.
1571 Moses, born in Egypt, and adopted by Pharaoh's daughter.
1556 Cecrops, with a colony from Egypt, settles Athens in Greece.
1546 Seamander from Crete begins the kingdom of Troy.
1503 Deluge of Deucalion in Thessaly.
1493 Cadmus carried the Phoenician letters into Greece, and built Thebes.
1491 Moses, after a number of miracles in Egypt, departs with 600,000 Israelites, which completed the 430 years of sojourning.
1485 The first ship that appeared in Greece brought from Egypt by Danaus to Rhodes, and brought with him his fifty daughters.
1453 The first Olympic games celebrated at Olympia in Greece.
1452 The Pentateuch, or five first books of Moses, are written in the land of Moab, where he died the following year, aged 110 years.
1451 The Israelites, after sojourning in the wilderness forty years, are led under Joshua into the land of Canaan, where they settle, having subdued the natives; and the period of the sabbatical year commences.
1406 Iron is found in Greece from the accidental burning of the woods.
1263 Argonautic expedition.
1198 The rape of Helen by Paris, in 1198, gave rise to the Trojan war, which continued ten years, when that city was taken and burned.
1048 David is sole king of Israel.
1004 The Temple is solemnly dedicated by Solomon.
896 Elijah, the prophet, is translated to heaven.
894 Money first made of gold and silver at Argos.
869 The city of Carthage in Africa, founded by Queen Dido.
814 The kingdom of Macedon begins.
776 The first Olympiad begins.
753 Æra of the building of Rome by Romulus first king of the Romans.
720 Samaria taken, and the kingdom of Israel overthrown by Salmanaser King of Assyria, who carried the ten tribes into captivity.
The first eclipse of the moon on record.

B. C.

- 658 Byzantium (now Constantinople) built by a colony of Athenians.
 604 By order of Necho, King of Egypt, some Phenicians sailed from the Red Sea round Africa, and returned by the Mediterranean.
 600 Thales of Miletus travels into Egypt, acquires the knowledge of geometry, astronomy and philosophy; returns to Greece, calculates eclipses, and gives general notions of the universe, and maintains that one Supreme Intelligence regulates all its motions.
 Maps, globes, and the signs of the Zodiack, invented by Anaximander, the scholar of Thales.
 597 Jehoiakin, King of Judah, is carried away captive by Nebuchadnezzar to Babylon.
 587 The city of Jerusalem taken after a siege of 18 months.
 562 The first comedy at Athens acted upon a moveable scaffold.
 559 Cyrus the first King of Persia.
 538 The kingdom of Babylon destroyed; that city being taken by Cyrus, who, in 536, issued an edict for the return of the Jews.
 534 The first tragedy acted at Athens, on a waggon, by Thespis.
 526 Learning is greatly encouraged at Athens, and a public library first founded.
 515 The second temple at Jerusalem is finished under Darius.
 509 Tarquin the seventh, and last king of the Romans is expelled, and Rome is governed by two consuls and other republican magistrates, until the battle of Pharsalia, 461 years.
 504 Sardis taken and burnt by the Athenians, which gave occasion to the Persian invasion of Greece.
 486 Eschylus, the Greek Poet, first gains the prize of tragedy.
 481 Xerxes, King of Persia, begins his expedition against Greece.
 458 Ezra is sent from Babylon to Jerusalem, with the captive Jews, and the vessels of gold and silver, &c being seventy weeks of years, or 490 years before the crucifixion of our Saviour.
 454 The Romans send to Athens for Solon's laws.
 451 The Decemvirs created at Rome, and the laws of the twelve tables compiled and ratified.
 443 Censors created at Rome.
 432 Nineteen years cycle invented by Meton.
 430 The history of the Old Testament finishes about this time.
 430 Malachi, the last of the prophets.
 401 Retreat of 10,000 Greeks, under Xenophon.
 400 Socrates, the founder of moral philosophy among the Greeks, put to death by the Athenians, who soon after repent and erect to his memory a statue of brass.
 396 Philip King Macedon murdered, and succeeded by his son Alexander the Great
 382 Alexandria in Egypt built.
 391 Alexander, king of Macedon, conquers Darius King of Persia, and other nations of Asia.
 323 Dies at Babylon, and his empire is divided by his generals into four kingdoms.
 291 Darkness at Rome at noon day.
 290 Solar quadrants introduced at Rome.
 285 Dionysius, of Alexandria, began his astronomical era on Monday, June 26, being the first who found the solar year to consist exactly of 365 days, 5 hours and 49 minutes.
 284 Ptolemy Philadelphus, King of Egypt, employs seventy-two interpreters to translate the Old testament into the Greek language which is called the Septuagint.
 269 The first coinage of silver at Rome.
 264 The first Punic war begins, and continues 24 years.
 260 The Romans first concern themselves in naval affairs, and defeat the Carthaginians at sea.
 250 Eratosthenes first attempted to measure the earth.
 218 The second Punic war begins and continues 17 years. Hannibal passes the Alps, and defeats the Romans in several battles.
 190 The first Roman army enters Asia, and from the spoils of Antiochus brings the Asiatic luxury to Rome.
 170 Eighty thousand Jews massacred by Antiochus Epiphanes.
 168 Perseus defeated by the Romans, which ends the Macedonian kingdom.
 167 The first library erected at Rome, of books brought from Macedonia.
 163 The government of Judea under the Maccabees begins and continues 128 years.
 146 Carthage and Corinth rased to the ground by the Romans.

CHRONOLOGICAL TABLE.

B.C.

- 145 A hundred thousand inhabitants of Antioch massacred in one day by the Jews.
 133 The history of the Apocrypha ends.
 52 Julius Cæsar makes his first expedition into Britain.
 47 The battle of Pharsalia between Cæsar and Pompey, in which the latter is defeated.
 The Alexandrian library, consisting of 400,000 valuable books, burnt by accident.
 45 The war of Africæ, in which Cato kills himself.
 The solar year introduced by Cæsar.
 41 Cæsar killed in the senate house, after having fought 50 pitched battles and overthrown the liberties of his country.
 43 Brutus, one of the conspirators against Cæsar, and chief of the republicans, being vanquished in the battle of Philippi, kills himself.
 41 The battle of Actium fought, in which Mark Antony and Cleopatra are totally defeated by Octavius, nephew to Julius Cæsar.
 30 Alexandria taken by Octavius, and Egypt reduced to a Roman province.
 27 Octavius, by a decree of the senate, obtains the title of Augustus Cæsar, and an exemption from the laws, is the first Roman emperor.
 8 Rome is at this time 50 miles in circumference, and contains 463,000 men fit to bear arms.
 The temple of Janus is shut by Augustus, as an emblem of universal peace; and JESUS CHRIST is supposed to have been born in September, or on Monday, December 25.

After Christ.

- 12 Christ disputes with the doctors in the temple.
 29 —— is baptized in the wilderness by John.
 33 —— is crucified on Friday, April 3, at 3 o'clock, P. M.
 His resurrection on Lord's Day, April 5: His ascension, Thursday, May 14.
 36 St. Paul converted.
 39 St. Matthew writes his Gospel.
 Pontius Pilate kills himself.
 40 The name of Christians first given at Antioch to the followers of Christ.
 43 Claudius Cæsar's expedition into Britain.
 44 St. Mark writes his Gospel.
 45 Christianity carried into Spain.
 49 London is founded by the Romans.
 51 Caractacus, the British king, is carried in chains to Rome.
 52 The council of the Apostles at Jerusalem.
 55 St. Luke writes his Gospel.
 59 The tyrant Nero puts his mother and brothers to death.
 60 Christianity preached in Britain.
 61 Boadicea, the British queen, defeats the Romans; but is conquered soon after by Suetonius governor of Britain.
 62 St. Paul is sent in bonds to Rome—writes his epistles between 51 and 66.
 63 The Acts of the Apostles written.
 Christianity is supposed to be introduced into Britain by St. Paul, or some of his disciples about this time.
 64 Rome set on fire, and burned for six days; upon which began, under Nero the first persecution against the Christians.
 67 St. Peter and St. Paul put to death.
 70 Titus takes Jerusalem, which is rased to the ground, and the plough made to pass over it.
 79 Herculaneum overwhelmed by an eruption of Mount Vesuvius.
 95 St. John the Evangelist wrote his Revelation—his Gospel in 97.
 136 The second Jewish war ends, when they were all banished Judea.
 139 Justin writes his first apology for the Christians.
 152 The Emperor Antonius Pius stops the persecution against the Christians.
 274 Silk first brought from India, and the manufacture of it introduced into Europe 551.
 303 The tenth general persecution begins under Dioclesian and Galerius.
 306 Constantine the Great begins his reign.
 308 Cardinals first instituted.
 313 The tenth persecution ends by an edict of Constantine, who favors the Christians, and gives full liberty to their religion.
 325 The first general council at Nice, when 318 fathers attended against Arius, where was composed the famous Nicene Creed.

A. C.

- 328 Constantine removes the seat of empire from Rome to Byzantium, which is thenceforward called Constantinople.
- 331 Constantine orders all the heathen temples to be destroyed.
- 363 The emperor Julian, the apostate, endeavors in vain to rebuild the temple of Jerusalem.
- 364 The Roman empire is divided into the eastern (Constantinople the capital) and western (of which Rome continued to be the capital;) each being now under the government of different emperors.
- 400 Bells invented by bishop Paulinus of Nola in Campagna.
- 410 Rome taken and plundered by Alaric, King of the Goths.
- 412 The Vandals begin their kingdom in Spain.
- 420 The kingdom of France begins, under Pharamond.
- 432 St. Patrick began to preach in Ireland : died 493 aged 122 years.
- 447 Attila, (called the scourge of God) with his Huns ravages the Roman empire.
- 476 The western empire entirely destroyed ; upon the ruins of which several new states arise in Italy ; under whom literature is extinguished, and the works of the learned are destroyed.
- 496 Clovis, king of France, baptized, and Christianity introduced.
- 510 Paris becomes the capital of France.
- 516 The computing of time by the Christian era is introduced Dyonysius the monk.
- 529 The code of Justinian, the eastern emperor, is published.
- 557 A terrible plague, all over Europe, Asia, and Africa, which continues near fifty years.
- 581 Latin ceased to be spoken about this time in Italy.
- 600 Bells first used in churches.
- 606 The power of the Popes begins by the concessions of Phocas, emperor of the east.
- 622 Mahomet flies from Mecca to Medina in Arabia. His followers compute their time from this era, called Hegira, *i. e.* the Flight.
- 637 Jerusalem taken by the Saracens or followers of Mahomet.
- 642 Alexandria in Egypt is taken by the Saracens, and the grand library there burned by order of Omar their caliph, or prince.
- 664 Glass invented in England by Benalt, a monk.
- 696 Churches first began to be built in England.
- 713 The Saracens conquer Spain.
- 726 The controversy about images begins, which disturbs the Eastern empire.
- 748 The computing of years from the birth of Christ begins.
- 761 Thirty thousand books burnt by order of the emperor Leo.
- 800 Charlemagne, king of France, begins the empire of Germany, afterwards called the western empire, and endeavors in vain to restore learning in Europe.
- 828 Egbert unites the Heptarchy by the name of England.
- 886 Juries first instituted.
- 896 Alfred the Great, after subduing the Danish invaders, composes his body of laws ; divides England into counties, hundreds, and tythings ; founds the University of Oxford.
- 915 The University of Cambridge founded.
- 936 The Saracen empire divided into seven kingdoms by usurpation.
- 940 Christianity established in Denmark.
- 989 Christianity established in Russia.
- 991 The figures in Arithmetic are brought into Europe by the Saracens, from Arabia. Letters of the alphabet were hitherto used.
- 1000 Paper made of cotton rags comes into use, that of linen do. 1170.—The manufactory introduced into England at Dartford 1588.
- 1014 The famous battle of Clontarf was fought wherein the Danes were completely defeated with the loss of 11,000 men, and driven out of Ireland.
- 1015 Children forbidden by law to be sold by their parents in England. Priests forbidden to marry.
- 1017 Canute, king of Denmark, gets possession of England.
- 1025 Musical gamut invented.
- 1040 The Danes driven out of Scotland.
- 1041 The Saxon line restored under Edward the Confessor.
- 1043 The Turks become formidable and take possession of Persia.
- 1054 Leo IX. the first Pope that kept up an army.
- 1065 The Turks take Jerusalem from the Saracens.
- 1066 The battle of Hastings fought, between Harold and William duke of Normandy, after which William becomes King of England.
- 1070 William introduces the feudal law.
- 1075 Henry IV. Emperor of Germany and the Pope quarrel about the nomination of the German bishops. Henry in penance, walks barefooted to Rome, towards the end of January.

A. C.

- 1080 Doomsday book began to be compiled by order of William, from a survey of all the Estates in England, and finished in 1086.
 The tower of London built by the same prince, to curb his English subjects.
- 1086 Kingdom of Bohemia begun.
- 1091 The Saracens in Spain, being hard pressed by the Spaniards, call to their assistance Joseph, King of Morocco; by which the Moors get possession of all the Saracen dominions in Spain.
- 1096 The first crusade to the Holy Land to drive thence the infidels.
- 1151 The canon law collected by Gratian, a monk of Bologna.
- 1163 London bridge, first built of stone.
- 1180 Glass windows began to be used in private houses in England.
- 1182 Pope Alexander III. compelled the kings of England and France to hold the stirrups of his saddle when he mounted his horse,
- 1186 The great conjunction of the sun moon and all the planets in Libra, happened in September.
- 1192 The battle of Ascalon, in Judea, in which Richard, King of England, defeats Saladin's army consisting of 300,000 combatants
- 1200 Chimneys were not known in England.
 Surnames now began to be used; first among the nobility.
- 1203 London incorporated, and obtained its first charter from King John.
- 1215 Magna Charta is signed by King John and the barons of England.
- 1227 The Tartars, a new race of Barbarians, under Gingis Khan, emerge from the northern part of Asia, conquer the greatest part of that continent, and in 22 years destroy upwards of 14 millions of people.
- 1233 The inquisition, begun in 1204, is now trusted to the Dominicans.
- 1252 Magnifying glasses invented by Roger Bacon.
- 1253 The famous astronomical tables composed by Alonzo King of Castile.
- 1258 The Tartars take Bagdad, which ends the empire of the Saracens.
- 1265 Acho, King of Norway, invades Scotland with 160 sail, and lands 20,000 men at the mouth of the Clyde, but most of them are cut to pieces by Alexander III. who recovers the western isles.
- 1273 The empire of the present Austrian family begins in Germany.
- 1280 Pulvis fulminans and gunpowder invented by Roger Bacon.
- 1282 Wales united to England.
- 1285 Spectacles invented by Alexander Spina, a Spanish monk.
- 1298 The present Turkish empire begins in Bithynia under Ottoman.
 Silver hasted knives, spoons, and cups, a great luxury. Splinters of wood generally used for lights
 Wine sold by apothecaries as a cordial.
- 1300 Windmills invented.
- 1300 About this time the mariner's compass was invented, or improved by John Gioia, or Goya, a Neapolitan. The flower-de-luce, the arms of the duke of Anjou, then king of Naples, was placed by him at the point of the needle, in compliment to that prince.
- 1307 The beginning of the Swiss Cantons.
 Interest of money in England at 45 per cent.
- 1308 The Popes remove to Avignon in France for 70 years.
- 1320 Gold first coined in Christendom—in England 1344.
- 1336 Two Brabant weavers settled at York, which, says Edward III. may prove of great benefit to us and our subjects.
- 1337 The first comet appeared whose course is described with astronomical exactness.
- 1340 Gunpowder first suggested as useful for warlike purposes by Swartz, a monk of Cologne; 1346, Edward III., had four pieces of cannon, which contributed to gain him the battle of Cressy.
- Oil painting first made use of, by John Vaneck.
- 1344 The first creation to titles by patent used by Edward III.
- 1352 The Turks first enter Europe.
- 1356 The battle of Poictiers, in which king John of France and his sons are taken prisoners by Edward the Black Prince.
- 1357 Coals first brought to London.
- 1362 The law pleadings in England, changed from French to English, as a favor of Edward III. to his people.
- 1386 A company of linen weavers from the Netherlands established in London.
- 1391 Cards invented in France for the king's amusement.
- 1402 Bajazet defeated by Tamerlane, and the power of the Turks almost entirely destroyed.
- 1404 Hats for men invented at Paris by a Swiss.
- 1422 Denmark united with the crown of Norway.
- 1415 The battle of Agincourt, gained over the French by Henry V. of England.

CHRONOLOGICAL TABLE.

799

A. D.

- 1428 The siege of Orleans. The celebrated Maid of Orleans appears, and gives the first blow to the English power in France. She is afterwards taken prisoner and basely put to death.
- 1430 Laurentius of Haerlem invents the art of Printing, which he practised with separate wooden types. Gottenburg afterwards invented cut metal types. Peter Schaeffer invented the mode of casting types in matrices. But the most authentic accounts ascribe the invention of Printing to Dr. Faust, or Faustus, in 1444.
- 1441 The sea breaks in at Dort, in Holland, and drowns 100,000 people.
- 1446 The Vatican library founded at Rome.
- 1453 Constantinople taken by the Turks, which utterly overthrows the Roman empire.
- 1454 Otto Guericke, a German, invents the air-pump.
Duelling appointed in certain cases in France, in order to have the judgment of God.
- 1460 Engravings and etchings in copper invented.
- 1471 Decimal arithmetic invented, and the use of tangents in trigonometry introduced, by Regiomontanus.
- 1485 Great numbers carried off by the sweating sickness.
- 1489 Maps and sea charts first brought to England by Bartholomew Columbus.
- 1492 AMERICA discovered by Columbus.
- 1494 Algebra first known in Europe.
- 1497 The Portuguese first sail to the East Indies by the Cape of Good Hope.
South America discovered by Americus Vespucius.
North America discovered by Cabot.
- 1503 Mines, used in the attack and defence of places, invented.
- 1509 Gardening introduced into England from the Netherlands.
The island of Jamaica settled by Spain.
- 1512 Florida discovered.
- 1515 Paraguay discovered by the Spaniards, and settled by them 1585.
- 1517 Martin Luther began the Reformation.
Egypt conquered by the Turks.
- 1518 Magellan, in the service of Spain, discovers the straits which bear his name, makes the first voyage round the world, but is killed by the savages in the Maramne islands.
Republic of Geneva founded.
- 1520 Henry VIII. for his writings in favor of Popery, receives the title of "Defender of the Faith" from the Pope.
Chocolate first brought from Mexico by the Spaniards.
- 1529 The name of Protestant takes it rise from the Reformed, protesting against the church of Rome, at the diet of Spires in Germany.
- 1530 Copernicus revives the Pythagorean system of astronomy.
- 1539 The first English edition of the Bible authorised; the present translation finished 1611.
About this time cannon began to be used in ships.
- 1540 The order of the Jesuits established by Ignatius Loyola, a Spaniard.
- 1543 Silk stockings first worn by the French king.
Pins first used in England, before which time the ladies used skewens.
- 1545 The famous council of Trent begins, and continues 18 years.
- 1546 Interest of money first established in England by law at 10 per cent.
Potosi mountain discovered. The richest mine in America.
- 1549 Brazil settled by the Portuguese. Discovered in 1500.
- 1553 Circulation of the blood through the lungs first published, by Michael Servetus.
- 1557 Groats and half groats the greatest silver coin in England.
- 1560 John Knox establishes Presbyterianism in Scotland.
Siberia discovered in the reign of the Czar Ivan Basilides.
- 1562 John Ribalt, with a fleet from France, discovers the river St. Mary.
- 1563 Knives first made in England.
The 39 articles of the English faith established.
- 1565 Potatoes first brought to Ireland from New Spain, in America.
- 1569 Circulation of the blood published by Cisalpinus.
- 1572 The great massacre of Protestants at Paris, August 21.
- 1577 Sir Francis Drake sets sail on his voyage round the world—returned 1580, being the first English circumnavigator.
- 1579 The Dutch shake off the Spanish yoke, and found the republic of Holland.
English East India Company incorporated—established 1600.
- 1581 J. Usher, Archbishop of Armagh, born in Dublin, drew up 104 articles of religion for Ireland, 1615; which were established 1635.—Died 1656.

CHRONOLOGICAL TABLE.

- A. C.
- 1582 Pope Gregory introduces the New Style in Italy ; the 5th of October being counted 15.
 - 1583 Tobacco first brought from Virginia into England—first discovered by the Spaniards in Yucatan in 1520.
 - 1585 Davis' Straits discovered.
 - 1587 Mary, Queen of Scots, beheaded by order of Elizabeth, after 18 years' imprisonment.
 - Duelling introduced into England.
 - 1588 The Spanish Armada destroyed by Drake and other English Admirals.
 - Henry IV. passes the famous edict of Nantz, tolerating the Protestants.
 - The manufacture of paper introduced into England at Dartford.
 - 1589 Coaches first introduced into England.
 - Bombs invented at Venlo.
 - 1590 Telescopes invented by Jansen, a Dutchman.
 - 1597 Watches first brought into England from Germany.
 - 1600 Building with brick introduced into England by the earl of Arundel.
 - 1602 Decimal arithmetic invented at Bruges.
 - New England discovered by Capt. Gosnold.
 - 1603 Queen Elizabeth (the last of the Tudors) dies, and nominates James VI. of Scotland (and first of the Stuarts) as her successor ; which unites both kingdoms under the name of Great Britain.
 - 1605 The gun powder plot discovered at Westminster.
 - Kepler lays the foundation of the Newtonian system of attraction.
 - 1607 Jamestown in Virginia settled.
 - 1608 Henry Hudson discovers the river in New-York, which bears his name.
 - Galileo, of Florence, first discovers the satellites about the planet Jupiter, by the telescope then just invented in Holland.
 - Quebeck settled by the French.
 - 1610 Henry IV. is murdered at Paris, by Ravilliac, a priest.
 - Hudson's Bay discovered by Capt. Henry Hudson, who is left by his men, with seven others, to perish on that desolate coast.
 - Great famine in Virginia.
 - 1614 Napier, of Marcheston, in Scotland, invents the logarithms.
 - New-York and New-Jersey settled by the Dutch.
 - The Aborigines of New-England thinned by pestilence, in the vicinity of Plymouth.
 - 1618 New Holland discovered by the Dutch.
 - 1619 Dr. W. Harvey, an Englishman, fully confirms the doctrine of the circulation of the blood.
 - 1620 About 100 persons (Puritans) settled at Plymouth, in Massachusetts, being the first English settlers in New-England.
 - 1620 & 21 One hundred and fifty young women of good characters were sent from England to marry planters in Virginia. The price of a wife to a husband who purchased her, was 100 pounds of tobacco ; but it soon rose to 150. Tobacco was then worth 3 pence per pound.
 - 2500 settlers arrived in this and the next year in that colony.
 - Negroes imported into Virginia.
 - 1622 Nova-Scotia first settled by the Scotch.
 - 1623 New-Hampshire settled by an English colony.
 - Great scarcity in New-England. The inhabitants obliged to subsist chiefly on ground-nuts, clams, muscles, and the gleanings of the forest and the sea shore.
 - A lobster with water, but without any vegetables, was their best dish.
 - 1624 Charter of Virginia vacated after the company had transported to it more than 9000 English subjects, and expended 150,000*l.* in forwarding the settlement.
 - 1625 The island of Barbadoes, the first English settlement in the West-Indies, is planted.
 - 1626 The barometer invented by Torricelli.
 - 1627 The thermometer invented by Drebellius.
 - A colony of Swedes settled on the Delaware river, Pennsylvania.
 - 1631 Newspapers first published at Paris.
 - 1633 Maryland settled by Lord Baltimore, with a colony of Roman Catholics ; the Charter being granted the year before.
 - 1635 Connecticut and Rhode-Island settled.
 - 1637 The Pequots destroyed by Connecticut. In carrying on this war, the white settlers used only one pint of rum, which was given to the sick.
 - 1638 The Laudean persecution in this year, and the preceding 17, had driven more than 20,000 inhabitants from Old to New-England.
 - African slaves imported into New-England from the West-Indies, in the way of trade.

CHRONOLOGICAL TABLE.

801

A. C.

- 1638 Harvard College in Cambridge, Massachusetts, established.
- 1639 A general contribution over the province of Maryland, to erect a water mill for the use of the province.
- 1640 The massacre in Ireland, when 40,000 English Protestants were killed.
- 1642 Civil war begins in England.
- 1643 The first printing-office in New-England established at Cambridge.
- 1643 The colonies of Massachusetts, Plymouth, Connecticut, and New-Haven, become one for defined purposes, by the name of the United Colonies of New-England. This union not only promoted peace and harmony among the colonies, while civil war raged in England, but made them formidable both to the Dutch in New-Amsterdam, and the aborigines of the country. It was also instrumental in promoting the civilization and conversion of the Indians. The Society incorporated in England, for propagating the gospel among the Indians in New-England, made the commissioners of the United Colonies their correspondents and agents for dispersing their charitable donations. This correspondence and agency continued from 1656, till the dissolution of the Union in 1686, and was eminently useful in reforming and meliorating the condition of the Indians.
- 1644 A great massacre by the Indians in Virginia.
- 1646 Episcopacy abolished in England.
- Massachusetts passes an act for evangelising the Indians.
- 1647 A very mortal epidemical sickness prevails in New-England.
- The first Selenographic maps made by Hevelius.
- 1649 An association entered into in New-England, by the Governor and Council of Massachusetts, against wearing long hair.
- Charles I. beheaded at Whitehall, January 30, aged 49.
- 1652 The speaking trumpet invented by Kircher, a Jesuit.
- Mint erected in New-England for coining money.
- 1653 Great fire in Boston ; also in the years 1676, 1679, 1711, 1760.
- 1654 Cromwell assumes the Protectorship.
- 1655 The English under admiral Penn take Jamaica from the Spaniards.
- 1656 The inhabitants of Massachusetts respectfully refuse Cromwell's request to migrate to Jamaica, though he offered them ample protection, and all the powers of government.
- 1658 Cromwell dies, and is succeeded in the Protectorship by his son Richard.
- 1659 Transfusion of blood first suggested at Oxford.
- 1660 King Charles II. is restored by Monk, commander of the army, after an exile of twelve years in France and Holland.
- Episcopacy restored in England and Scotland.
- The people of Denmark being oppressed by the Nobles, surrender their privileges to Frederic III. who becomes absolute.
- 1662 The Royal Society established in London, by Charles II.
- Pendulum clocks invented by John Fromentel, a Dutchman.
- Fire engines invented.
- 1664 The Bible translated into the Indian language, by Elliot, the Apostle.
- 1665 The plague rages in London, and carries off 68,000 inhabitants.
- 1666 The great fire of London began September 2, and continued five days, in which were destroyed 13,000 houses and 400 streets.
- Tea first used in England.
- Academy of sciences established in France.
- 1667 The peace of Breda, which confirms to the English the New Netherlands, now known by the names of Pennsylvania, New-York and New-Jersey.
- 1669 South-Carolina planted by an English colony, under Governor Sayle, under a patent granted by Lord Clarendon, 1664.
- 1670 The English Hudson's Bay Company incorporated.
- 1671 Academy of Architecture established in France.
- 1672 Lewis XIV. overruns great part of Holland, when the Dutch open their sluices, being determined to drown their country, and retire to their settlements in the East Indies.
- 1676 Repeating clocks and watches invented by Barlow.
- 1678 The habeas corpus act passed.
- 1679 Darkness at London, that one could not read at noon-day, January 12.
- New-Hampshire, which had been hitherto as under the same jurisdiction with Massachusetts, erected into a separate government.
- 1680 A great comet appeared, and continued visible from Nov. 3 to March 9.
- William Penn receives a patent for Pennsylvania, March 4th—and grants a charter to adventurers, 1682.
- Charleston, S. C. founded.
- 1682 College of Physicians at Edinburgh incorporated.

CHRONOLOGICAL TABLE.

A. C.

- 1682 Royal Academy established at Nismes.
- 1683 William Penn purchases from James, Duke of York, that part of the New Netherlands now known by the name of "the State of Delaware."—Philadelphia began to be built.—India stock sold from 360 to 500 *per cent.*
- First legislative assembly in New-York.
Printing presses forbidden in Virginia, by its royal governor.
- 1684 Massachusetts deprived of its charter.
- 1685 The edict of Nantz infamously revoked by Lewis XIV. and the Protestants cruelly persecuted.
- 1686 Sir Edmund Andross appointed Governor General of New-England, and shortly after of New-York and New-Jersey, with powers subversive of colonial privileges. He ruled the whole with a rod of iron, till the revolution of 1688, in England, freed both the mother country and the colonies from arbitrary power.
- 1688 The revolution in Great Britain begins, Nov. 5. King James abdicates the throne, and retires to France, December 3, following.
- 1689 King William and Queen Mary, daughter and son in law to James II. are proclaimed, Feb. 16.
- 1690 Sir William Phips reduces Port Royal, and takes possession of the whole sea-coast from it to the New-England settlements.
Paper money, the first emission in the colonies, was issued by Massachusetts, to defray the expenses of these expeditions.
French refugees, who had been exiled in consequence of the revocation of the edict of Nantz, settle in Virginia, New-York, Carolina, and Boston.
- 1692 A new charter established, which constituted Massachusetts a royal province, and added to it the colony of Plymouth, the province of Maine, &c. but separated New-Hampshire from it.
Witchcraft delusion in Massachusetts.
- 1693 Bayonets at the end of loaded muskets first used by the French.—Bank of England established by king William.—The first public lottery was drawn this year.—Stamp duties instituted in England.
- 1694 Rice introduced into South-Carolina by Langgrave Smith.
- 1696 The peace of Ryswick.
- 1697 The debt of Great Britain was about *five millions* sterling—in 1790 it was 270 millions.
- 1698 French make a settlement in Florida, near the mouth of the Mississippi, now the Orleans Territory of the United States.
- 1699 The Scots settled a colony at the Isthmus of Darien, in America, and called it Caledonia.
- 1700 Yale College established at Saybrook, Connecticut—removed to New-Haven 1716. There were only two colleges in the English colonies, now United States. At the declaration of Independence, in 1776, there were only nine. In the following 25 years, 18 new ones were incorporated, and most of them established.
- 1701 Prussia erected into a kingdom.
Cottonian library settled for public benefit.
Society for the propagation of the Gospel in foreign parts established.
- 1702 King William dies, aged 50, and is succeeded by Queen Anne, daughter to James II.
- 1704 Gibraltar taken from the Spaniards by the combined fleets of Britain and Holland under admiral Rooke, July 23.
The battle of Blenheim, won by the duke of Marlborough and allies against the French.
The Court of Exchequer instituted in England.
- 1706 England and Scotland united under the name of "The Kingdom of Great Britain," June 22.
- 1707 The French invade Carolina, but are repulsed with great loss.
- 1708 Sardinia erected into a kingdom, and given to the duke of Savoy.
- 1709 Peter the Great, Czar of Muscovy, defeats Charles XII. at Pultowa, who flies to Turkey.
- 1710 The cathedral church of St. Paul, London, rebuilt by Sir Christopher Wren, in 37 years, at the expense of one million (4,440,000 dollars) paid by a duty on coals.
Port Royal was taken by the New-England colonies.
Post Office first established in America by act of the British Parliament.
2700 Palatines arrive in New-York.
- 1712 The French make a settlement in Carolina, near the river Mississippi, in what is now called the Mississippi Territory, and give grants of land as high up the Mississippi as its junction with the Illinois river.
- 1713 The peace of Utrecht, whereby Newfoundland, Nova Scotia, New Britain, and Hudson's Bay, in North America, were yielded to Great Britain: Gibraltar and Minorca, in Europe, were also confirmed to the said crown by this treaty.

A. C.

- 1714 Queen Anne dies, at the age of 50, and is succeeded by George I.
 1715 Lewis XIV. dies, and is succeeded by his great grandson Lewis XV.
 The rebellion in Scotland.
 A general rising of the Indians against South-Carolina.
 1716 Aurora Borealis first taken notice of in England—1719 in New-England.
 1717 New-Orleans, and Beaufort, S. C. founded.
 1719 The Mississippi scheme at its height in France.
 Lombe's silk throwing machine, containing 26,586 wheels, erected at Derby ; takes up one eighth of a mile ; one water wheel moves the rest ; and in 24 hours it works 318,504,960 yards of organzine silk thread.
 The South Sea scheme in England begun April 7, was at its height at the end of June, and sunk about September 20.
 1721 Inoculation for the small-pox, on the suggestion of Cotton Mather, was introduced into Boston by Dr. Boylston.
 1722 Rector Cutler, and five other Congregational ministers turn Episcopalians.
 1727 King George dies in the 68th year of his age, and is succeeded by his only son, George II.
 Russia, formerly a dukedom, is now established as an empire.
 A great earthquake in New-England. This extended from Kennebeck to the river Delaware. There have been five great earthquakes in New-England, viz. in 1688, 1658, 1663, 1727, 1755, and minor ones in 1653, 1668, 1609, 1670, 1705, 1720, 1732, 1744, 1755, 1757, 1760, 1769, 1771, 1783. These were all described as coming from about N. W. and going off about S. E.
 1730 Carolina purchased by the crown for 17,500l. and divided into North and South: 6208 emigrants arrive in Pennsylvania.
 1731 The first person executed in Britain for forgery.
 1732 Kouli Khan usurps the Persian throne, conquers the Mogul empire, and returns with two hundred and thirty-one millions sterling.
 GEORGE WASHINGTON born February 22, O. S.
 Several public spirited gentlemen begin the settlement of Georgia, the most southern of the United States of America.
 1733 Col. Pury leads a colony of Swiss to South Carolina, and builds Purysburgh.
 1735 The throat distemper prevailed in New-England, and afterwards in 1754 and 5, and in 1804, 5, 6, and 7.
 1737 The earth proved by admeasurement, to be flattened towards the poles.
 1738 Westminster bridge, consisting of fifteen arches, begun; finished in 1750, at the expense of 389,000l. defrayed by Parliament.
 1740 Insurrection of negroes in South Carolina.
 1742 A Spanish fleet of 32 sail, with more than 3000 men, invaded Georgia, but were repulsed.
 1743 The culture of the indigo plant introduced into South-Carolina, by Miss Lucas.
 1744 War declared against France by Britain.
 Commodore Anson returns from his voyage round the world.
 1745 Rebellion in Scotland.
 Louisburg taken by the New-Englanders, with the aid of a small British fleet.
 The French, fired with resentment, prepare to attack Boston, and to ravage the coast from Nova Scotia to Georgia.
 1746 D'Ainville, with a formidable French armament, greatly magnified by common fame, but really consisting of forty-one vessels, of which eleven were ships of the line, and 3150 soldiers from Europe, who were to be joined with 1600 Canadians, French, and Indians, threatens destruction to the northern English colonies, but is providentially discomfited by stormy weather, and contagious diseases. The arrival of D'Ainville on the coast, gave an alarm to the colonies, nearly equal to that which England experienced from the Spanish Armada, in 1588.
 Electric shock discovered.
 Lima and Callao swallowed up by an earthquake, October 20. This earthquake continued till November 20th, and destroyed 50,000 persons.
 1748 The peace of Aix la Chapelle, by which a restitution of all places taken during the war, was to be made on all sides.
 Halifax, in Nova Scotia, built.
 1749 The interest of the British funds reduced to three per cent.
 1750 The British Parliament pass an act prohibiting any slitting mill or forge, or any iron works in America, June.
 1751 Pennsylvania hospital founded. The first institution of the kind in the English colonies.
 1752 Antiquarian Society at London incorporated.
 The new style introduced into Great Britain; the third of September being counted the fourteenth.

CHRONOLOGICAL TABLE.

A. C.

- 1752 Adrianople destroyed by an earthquake.
- 1753 The British Museum erected at Montague House.
Society of Arts, Manufactures, and Commerce, instituted in London.
George Washington sent on a mission to the Ohio, with a remonstrance to the French commandant, against his occupation of territory within the chartered limits of Virginia.
- 1754 A Congress met at Albany, (New-York) when Dr. Franklin proposes a plan for the union of all the colonies.
Sept. 2. Grand Cairo had 40,000 inhabitants destroyed by an earthquake.
- King's (now Columbia) College (N. Y.) founded.
- 1755 Lisbon, in Portugal, destroyed by an earthquake.
- General Braddock defeated on his way to attack Fort Duquesne, on the Ohio.
- 1756 War declared between France and Great Britain. The Ohio lands the principal cause of the contest.
One hundred and forty-six Englishmen are confined in the black hole at Calcutta, in the East Indies, by order of the Nabob, and 123 found dead next morning.
- 1757 Identity of electric fire and lightning discovered by Dr. Franklin, who thereupon invented a method of securing buildings from thunder storms, by metallic conductors.
- 1758 Fort du Quesne (now Pittsburg) taken from the French by General Forbes, February 28.
- 1759 General Wolfe is killed in the battle of Quebec, which is gained by the English, and General Montcalm is slain.
- 1760 Black Friar's bridge, consisting of nine arches, begun; finished 1770, at the expense of 152,840l. to be discharged by a toll.
George II. dies, and is succeeded by George III.
Canada conquered—French power in North America destroyed.
- 1762 War declared against Spain.
Peter III. Emperor of Russia, is deposed, imprisoned, and murdered.
- 1763 Peace of Paris—England retaining Canada and Florida, extends her American empire from the gulf of Mexico to the northern extremity of the continent. In this and the preceding four years of English victories, upwards of 4000 families returned to their plantations, on the frontiers of the middle and southern states, from which they had been previously driven by the events of war.
- 1764 Anatomical lectures first delivered by Dr. Shippen, in Philadelphia.
The Parliament granted 10,000l. to Mr. Harrison, for his discovery of the longitude by his time piece.
College at Providence (R. I.) founded.
- 1765 Stamp Act passed, and next year repealed.
Virginia, on motion of Patrick Henry, passed the first resolutions denying the right of Parliament to tax the colonies.
- 1766 A great spot passed the sun's centre.
Gibraltar almost destroyed by a storm.
- 1767 British taxation renewed by a tax on tea, painters' colors, &c. payable on their landing in the colonies.
- 1768 Academy of painting established in London.
British troops are stationed in Boston, to awe the inhabitants.
Non-importation agreements entered into by the colonists.
- 1769 Electricity of the Aurora Borealis discovered by Wideburg, at Jena.
Dartmouth College founded, New-Hampshire.
- 1770 A riot at Boston. The British troops fire upon and kill five or six of the inhabitants, but the killers are acquitted by a Boston jury.
- 1771 Dr. Solander and Mr. Banks, in his Majesty's ship the Endeavor, Lieutenant Cook, return from a voyage round the world, having made several important discoveries.
Insurrection in North-Carolina, against lawyers and courts, quelled in a battle at Alamance, in which 200 of the insurgents were killed. Twelve were taken, tried, and condemned. Of these six were executed.
- 1772 Twelve hundred and forty people killed in the island of Java by an electrified cloud.
The emperor of Germany, empress of Russia, and the king of Prussia, strip the king of Poland of great part of his dominions, which they divide among themselves, in violation of the most solemn treaties.
Committees of correspondence instituted throughout the colonies.
- 1773 Captain Phipps is sent to explore the North Pole; but having made eighty-one degrees, is in danger of being locked up by the ice, and returns.
The Jesuits expelled from the Pope's dominions, and suppressed by his bull.
Dutied tea, \$40 chests destroyed by the Bostonians.

A. C.

- 1774 In consequence of this trespass on private property, a penal statute for shutting up the port of Boston was passed in England, and resisted in America.
- A general Congress meets in Philadelphia—petitions for a redress of grievances, and resolves on a general non-importation and non-exportation of all merchantable commodities.
- 1775 April 19. The first action happens in America between the British troops and the Americans, at Lexington, in which the former are defeated. Ticonderoga and Crown Point taken by colonels Allen and Easton. A dreadful fire in Grenada; loss computed at 500,000L. Articles of confederation and perpetual union agreed on by the American colonies, May 20.
- Paper money emitted by Congress to the amount of three millions of dollars, and afterwards, at different periods, during the war, to the amount of two hundred millions. In 1781 it ceases to circulate.
- General George Washington is by Congress unanimously appointed Commander in Chief of the American army, June, 16; on July 2d arrives at Cambridge, (Mass.) and takes upon him the command.
- A bloody battle fought at Bunker's Hill between the king's troops and the Americans, when the latter being overpowered by numbers are forced to retreat, June 17. Charlestown burnt the same day.
- Post office established by Congress, July 26.
- Falmouth, in the District of Maine, destroyed by the British, October 18.
- General Montgomery takes Montreal, November 12.
- An unsuccessful attack made by the Americans on Quebec, when the gallant Montgomery is slain, December 31.
- 1776 Norfolk, in Virginia, burnt by order of Lord Dunmore, January 1.
- Boston evacuated by the British, March 17.
- Congress, in consequence of the repeated provocations, received from Great Britain, declare the colonies free, sovereign and independent, under the name of the UNITED STATES OF AMERICA, July 4.
- The battle of Flatbush in Long-Island, when the Americans are defeated with the loss of 2000 men killed, and 1000 prisoners; New-York is soon after taken possession of by the British, August 27.
- Rhode-Island taken by the British, December 6.
- Nine hundred Hessians taken by general Washington, at Trenton, December 26.
- Religious toleration was granted in Austria.
- 1777 January 2. General Washington defeats the British at Princeton.
- Ticonderoga evacuated by general St. Clair, July 6.
- Marquis De la Fayette appointed major-general in the American army.
- Lieutenant-general Burgoyne is obliged, at Saratoga, to surrender his whole army, consisting of 5790 men, to the Americans, under generals Gates, Lincoln and Arnold, October 17.
- The American army, under general Washington, retire to winter quarters at Cherry Valley, where they suffer severely from famine and want of clothing, December.
- 1778 Dominica taken by the French, September 7.
- St. Lucia taken from the French, December 28.
- Alliance with France. A French fleet is sent to the aid of the new formed states. Philadelphia evacuated by the British. Battles of Monmouth and Rhode Island. British commissioners, when too late, offer to the Americans terms of accommodation, which came up to all they asked for in their unanswered petitions to the king of Great Britain, in 1774 and 1775.
- 1779 Savannah, in Georgia, taken by the British.
- The Spaniards unite with France and America against Britain, June.
- St. Vincent taken from the French by the English, June 17.
- A predatory expedition, under the command of governor Tryon, sets out for Connecticut; the party sets fire to Fairfield and East Haven; plunders New Haven, and commits many other enormities, in July.
- Stony Point taken by the Americans under the command of general Wayne.
- 1780 The Protestant Association, to the number of 50,000 men, headed by Lord George Gordon, go to the House of Commons with a petition for the repeal of an act passed in favor of the Roman Catholics, June 2. This event is followed by the destruction of Catholic chapels, several prisons, and the most daring riots for several succeeding days, which are at last quelled by the interposition of the military; when numbers of the mob are killed, and many of the rioters soon after tried and executed.
- July 19. A maritime treaty between Russia, Sweden and Denmark was signed at Copenhagen, having for its object the protection of neutral commerce.
- Count Rochambeau arrives at Rhode-Island with 6000 land forces, July 10.

CHRONOLOGICAL TABLE.

A. C.

- 1780 Torture abolished in France, August 25.
 General Arnold, after having in vain attempted to deliver up West Point to the British, deserts to their service, and is by them appointed brigadier-general, September 26.
 Major Andre, adjutant-general to the British army, is hanged as a spy at Tappan, state of New-York, October 2.
 The British government declares war against Holland, December 10.
 Charleston surrenders to the British on terms of capitulation. South Carolina is overrun by the conquerors, but is gallantly defended by generals Sumter and Marion. Gates defeated near Camden.
 Constitution of Massachusetts established.
 American Academy of Arts and Sciences incorporated.
 May 19th, an uncommon darkness took place all over New England, for about 1½ hours, or from 10 or 11 A. M. till midnight. The darkness was so great that people were unable to read common print, to tell the time of the day by their watches, to dine, or transact their ordinary business without the light of candles. The people became dull and gloomy. Candles were generally lighted up in their houses. The birds became silent. The fowls retired to roost. Objects could not be distinguished but at a very little distance, and every thing bore the appearance and gloom of night. Similar days are said to have occurred, but inferior in degree and extent of darkness. October 21, 1716; August 9, 1732; October 9, 1762; in the northern or eastern states, and also on October 29, 1789, in Kentucky. These unusual appearances were not the effect of eclipses, but were supposed to result from layers of vapors, some ascending and other descending, so as to intercept the rays of the sun in their passage to the earth.
- 1780 and 1781. This winter is remarkable for its uncommon severity; so that in January the passage between New York and Staten Island is practicable for the heaviest cannon.
- 1781 The Dutch island of St. Eustatia taken by the British, February 3; retaken by the French, November 27.
 The island of Tobago taken by the French, June 2.
 Count de Grasse, with 28 sail of the line, arrives in the Chesapeake, and lands 3200 forces.
 Treaty of amity and commerce between America and Holland, October 8.
 Earl Cornwallis surrenders his whole army, consisting of 7000 men, to the American and French army, under the command of general Washington, at Yorktown, in Virginia, October 19.
 Henry Laurens is released from his long confinement in the Tower of London, December 31.
 Virginia cedes to the United States all her territory northwest of the Ohio, about 200,000,000 acres.
 Virginia adopts the preliminary measures for and consents to the erection of Kentucky into a separate state.
- 1782 Planet Herschel discovered.
 The first impression of the Bible in the United States is published by Robert Atiken, Philadelphia.
 The island of Minorca taken by the Spaniards, February 5.
 St. Christopher's taken by the French, February 12.
 Montserrat, in the West Indies, taken by the French, February 18.
 The British House of Commons address the king against the further prosecution of offensive war with North America, March 4.
 Holland acknowledges the sovereignty of the United States, April 19.
 Sir Guy Carleton arrives at New York, with powers to treat of peace with the Americans, May 5.
 The Spaniards defeated in their grand attack on Gibraltar, when their floating batteries are destroyed, September 13.
 Treaty concluded between the United States and the Republic of Holland, October 8.
 Ninety-six Christian Indians of the Moravian sect, living at Gnaden Huatten, within the limits of what is now the state of Ohio, were cruelly murdered in cold blood by white savages. The murderers could assign no justification, nor even apology for the unhallowed deed. The victims of their fury had always been peaceable and inoffensive, and had taken no part in the war then drawing to an end. The Indians submitted to their unavoidable fate with patient resignation, and without making any resistance. The only charge that could be alledged against them was, that they were Indians. Congress did them justice, as far as was in their power, by reinstating the survivors in the possession of their lands from which they had been driven.

CHRONOLOGICAL TABLE.

807

A. C.

- 1782 A ship of 74 guns built at Portsmouth, N. H. This was the first line of battle ship ever built in America.
- Provisional articles of peace signed between the American and British commissioners at Paris; by which the United States are declared by the king of Great Britain, to be free, sovereign and independent, November 30.
- The inquisition abolished at Naples.
- 1783 Preliminary articles of peace between France, Spain and Britain, signed at Versailles, January 20.
- 1783 Three earthquakes at Calabria Ulterior and Sicily; which destroy a great number of towns and inhabitants; February 5, 7 and 28.
- Treaty of Amity and commerce between the United States and Sweden, concluded April 1, ratified by Congress Sept. 25, following.
- New-York evacuated by the British troops, and General Washington makes a public entry into that city, November 25.
- General Washington resigns his commission to Congress, at Annapolis, December 23.
- Dickinson College (Carlisle, Penn.) founded.
- 1784 The definitive treaty of peace between the United States and Britain ratified by Congress, January 4.
- M. Lunardi ascends in a balloon from London; being the first attempt of the kind made in England, September 15.
- The Empress of China, a ship of 360 tons, sails from New-York for Canton.
- This was the beginning of the trade of the United States with China.
- Bank of Massachusetts incorporated.
- 1785 Mr. James Madison brings forward a motion in the House of Delegates of Virginia, to appoint commissioners, who, in concurrence with others, to be appointed by the different states, should form a system of commercial regulations, to be recommended for adoption to the different state legislatures.
- Friars and nuns suppressed in Germany.
- The first cistern in Charleston, S. C. for collecting and preserving rain-water for domestic use, was built by William Somersall.
- Humane Society of Massachusetts incorporated. Similar institutions about the same time were formed in most of the large towns on the sea-coast.
- An organ set up in a Congregational church in Boston.
- 1786 An insurrection breaks out in the state of Massachusetts, under Daniel Shay and others; it is, however, happily suppressed by the prudence and decision of Generals Lincoln and Shepard, with the loss of very few lives, December.
- The Philadelphia Dispensary for the gratuitous medical care of the sick poor in their own houses established.
- Connecticut cedes to the United States all the lands within her chartered limits west of Pennsylvania, with a reserve of about four millions of acres. 500,000 acres, part of this reserve, was granted by the State to the inhabitants of New-London, Fairfield, and Norwalk, whose property had been destroyed by the British troops in the revolutionary war. The remainder was sold in 1795 for \$1,200,000 and the proceeds appropriated as a perpetual fund for the support of schools in the state.
- Louis XVI. issues an edict for convening the *notables*, who afterwards meet at Paris, February 26, and December 29, following.
- 1787 The Federal Convention, which had for some time been assembled at Philadelphia, report to the different states the new constitution, or present system of federal government, September 17.
- A bridge built over Charles river, connecting Boston and Charlestown.
- A society for propagating the gospel among the Indians and others in North America, was incorporated in Massachusetts. The Moravians for half a century preceding had been zealously and successfully attentive to the propagation of the gospel among the Indians in America; but the period between 1787 and 1812 may be called the era of Missions.
- A series of essays, the work of Alexander Hamilton, James Madison, and John Jay, with the title of *Publius*, or the *Federalist*, published soon after the promulgation of the constitution, had a decided influence in procuring its acceptance, by enlightening the public mind in the true principles of government, and removing prejudices in favor of a high toned state sovereignty incompatible with the general good.
- The Presbyterians form four Synods, and a General Assembly.
- 1788 George Washington was unanimously elected President of the United States, and John Adams, Vice-President.
- Georgia University instituted.
- Card manufactory set up in Boston. A machine for cutting card-teeth had been previously invented by Mr. Chittenden of Connecticut.

CHRONOLOGICAL TABLE.

A. C.

- 1789 Congress met at New-York for the first time under the new constitution, March 4.
- March 4. to
April 30. George Washington was, in due form, publicly invested with the office of President of the United States of America.
- The National Assembly of France first convened, May 5, and on the 17th of June following the *tiers état*, or representatives of the people, after using various efforts to obtain a union with the clergy and nobility, without success, declare themselves the General Assembly, and proceed to business.
- They take an oath "never to separate till the constitution shall be completed," June 20th.
- University of North-Carolina founded.
- The Bastile, in Paris, taken by the national gards; July 14.
- Dr. Carroll of Maryland consecrated bishop, and soon after archbishop of the Roman Catholic church. He was the first and only Roman Catholic bishop in North America.
- Influenza pervades the United States, and again in 1808.
- 1790 The French king *voluntarily* appears before the National assembly, and declares "that he will defend the new constitution to the last moment of his existence," February 4.
- Friars and nuns suppressed in France.
- General Harmar defeated by the Miami Indians, with the loss of 183 men killed, and 31 wounded, September 30.
- Kentucky, detached by common consent from Virginia, is made an independent State.
- Secretary Hamilton makes his celebrated report on providing for the public debt. This was substantially adopted, and produced a sudden and extraordinary melioration of the state of the country.
- A law passed for securing copy right to authors.
- 1791 This year a census taken of the inhabitants of the United States, when the number is found to be 3,929,326.
- The king of France and family privately depart from Paris, with a view, as was believed, of escaping into Germany, June 20; are intercepted, near Varennes, and re-conducted to Paris on the 25th.
- Seven islands discovered in the South Pacific Ocean, between the Marquesas and the Equator, by Capt. Joseph Ingraham, of Boston.
- May 3. The crown of Poland was made hereditary.
- First Folio and Royal Quarto Bibles printed in America, at Worcester, Massachusetts; small Quarto at Trenton, New-Jersey.
- A Treaty is concluded at Pillitz, in Saxony, by a number of crowned heads, of which the partition of France, Poland, &c. is said to have been the principle object, July.
- Gen. St. Clair defeated by the Indians, near the Miami Village, with the loss of 640 Americans, his whole baggage, and eight pieces of artillery, November 4.
- United States bank with a capital of \$10,000,000, is established in Philadelphia, with branches at Boston, New York, Baltimore, and Charleston. S. C.
- 1792 The French National Assembly declare war against the king of Hungary and Bohemia, April 20.
- National mint established.
- A plan of union between the general assembly of the Presbyterian church in the United States, and the general association of Congregational churches in Connecticut, adopted.
- Louis XVI brought to trial, December 11; condemned January 19, 1793, and beheaded on the 21st of the same month.
- 1793 The French Convention declare war against the king of Britain and the Stadholder of Holland, February 1.
- The king of Sweden is shot at a masquerade, by Capt. Ankerstrom, March 16, and dies of his wounds the 29th of the same month.
- A dreadful disorder known by the name of the *yellow fever*, begins at Philadelphia, in July; and does not cease its depopulating ravages till the middle of November, following, during which time about 5000 people lose their lives.
- The late Queen of France beheaded, October 16.
- Neutrality between the belligerents of Europe proclaimed by Washington.
- The Proprietors of the Middlesex canal in Massachusetts, for connecting Merrimack river with Boston, were incorporated. In 1804 the canal was finished.
- 1794 A bill passed by Congress, laying an embargo for 30 days, which is afterwards continued for 30 more, March 26.
- John Jay, Chief Justice of the United States, appointed envoy extraordinary to Britain, April.
- The island of Guadaloupe taken from the British by the French.

CHRONOLOGICAL TABLE.

809

A. C.

- 1794 Union College (at Schenectady, N. Y.) founded.
 General Wayne defeats the Indians and Canadian militia near the rapids of the Miami of the lakes, August 20.
 The suburb of Praga, near Warsaw, taken by the Russian General Suvarrow, who gives the barbarous orders to his army to give quarters to no one; in consequence of which, upwards of 30,000 Poles, men, women, and children, are massacred, November 4.
 Insurrection in Pennsylvania, against the excise on spirituous liquors. Washington puts himself at the head of a large army to quell the insurgents, which was effected without bloodshed.
 John Jay makes a treaty with Great Britain. In consequence thereof the British surrender all their posts within the limits of the United States.
 Massachusetts Historical Society, for collecting materials for the history of the United States, was incorporated. In about 12 years after a similar one was established in New York.
- 1795 The old government of the Dutch in Holland abolished, and a revolution in favor of liberty commences without any public commotion, January 19.
 St. Lucia captured by the French, April 19.
 The King of Prussia concludes a separate peace with the French republic, April.
 A treaty of friendship, limits, and navigation, concluded between Spain and the United States, October 20.
 A treaty of peace and amity concluded between the Dey of Algiers and the United States, November 8.
 The unfortunate King of Poland made a formal surrender of his crown, for a pension, November 25.
 About this time general Eaton, when consul at Tunis, sent to Philadelphia a ram of the broad tailed breed of sheep in Africa. From this source this valuable species of sheep has been extensively propagated. Its fleece is of the first quality.
 Pennsylvania passes a law for establishing schools throughout the state.
 The first Massachusetts Turnpike Corporation established. The construction of artificial roads began a few years before in Pennsylvania and Connecticut, and rapidly extended north to the falls of Niagara, and south as far as the Potomac.
 Washington declines a reelection as president, and in a solemn valedictory address to his fellow citizens, inculcates on them "to bear incessantly on their minds, that nations as well as individuals were under the moral government of an infinitely wise, just and good providence—that the foundation of their happiness was morality and religion—that union among themselves was their rock of safety—and that to venerate their constitution and laws was to insure their liberties."
- The second cotton mill was erected in Rhode Island. The first had been erected in 1791. In the succeeding 15 years there were 87. In these the number of spindles was 80,000—persons employed 4000—Cotton used 3,600,000 lbs—yarn spun 2,880,000 lbs—value 3,140,000 dollars.
- 1796 Machines for beating out rice by water, contrived by Mr. Lucas, are generally introduced, and save an immensity of manual labor.
- 1797 A signal victory gained over the Spanish fleet by John Jarvis, February 14.
 JOHN ADAMS, elected president of the United States, and THOMAS JEFFERSON, vice president.
- An alarming mutiny on board the channel fleet, at Spithead, (England) April 15, and at Sheerness.
- Messrs. Pinckney, Marshal and Gerry, sent as envoys to France, (July) to accommodate existing differences between the United States and the French Republic—Returned unsuccessful, 1798.
- Lord Duncan's victory over the Dutch fleet, October 11.
- Treaty of peace between Austria and France signed at Campo Formio, Oct. 17.
- 1798 GEORGE WASHINGTON appointed, and accepted the commission of COMMANDER IN CHIEF OF THE ARMIES OF THE UNITED STATES, July.
 Rebellion in Ireland suppressed after much bloodshed.
- Lord Nelson obtained a victory over the French fleet, at Aboukir, near the mouth of the Nile, in which nine French ships of the line were taken, and two burnt, August 1.
- 1799 The French driven from nearly all their conquests in Italy by the Austrians and Russians under Suvarrow.
 Seringapatam taken by lieutenant-general Harris, and Tippoo Sultan killed, May 4.
 The directorial government abolished in France, and a new constitution framed. Bonaparte made first consul for ten years.
 The French frigate Insurgente taken by Truxton.

CHRONOLOGICAL TABLE.

- A. C.
- 1799 President Adams nominated Messrs. Ellsworth, Davie, and Murray, to make a further attempt to adjust differences with the French Republic, Feb.—The envoys embarked for France, November.
- GEORGE WASHINGTON** died December 14, aged 67, and left his country in tears.
- The American militia was upwards of 354,000 and the seamen upwards of 63,000.
- 1800 The American envoys concluded a convention with the French Republic, which was signed at Paris, September 3.
- A bill for uniting Ireland with Great Britain, signed July 2.
- American navy consisted of 42 vessels and 950 guns
- Vaccination introduced by Dr. Waterhouse, and extensively propagated over the United States by many, and particularly by John Vaughan of Philadelphia.
- Boats begin to pass through the canal in South Carolina, extending 22 miles between Santee and Cooper rivers. This work cost the proprietors above \$600,000—a sum exceeding seven times the amount of what the province had sold for 72 years before.
- 1801 The maritime treaty of 1780, between the three northern powers of Europe, was renewed, January.
- Treaty of peace between Germany and France, signed at Luneville, Feb. 9.
- The Legislature of Massachusetts agreed to present a respectful address to **JOHN ADAMS**, on the occasion of his retiring from the presidency of the United States, expressive of "the grateful and high sense the legislature entertain of the numerous and eminent services he has rendered his country, particularly as President of the United States; and assuring him of their undiminished confidence in his character, and of an affectionate welcome into the bosom of his country," March 3.
- THOMAS JEFFERSON**, elected president of the United States, and **AARON BURR**, vice president.
- National government removed to Washington.
- The manufacture of straw bonnets commenced in Wrentham, Massachusetts, and proceeded so rapidly, that after eight years the proceeds amounted annually to \$ 100,000.
- Oct. 1. Preliminary articles of peace between France, Great Britain, Spain and Holland, signed at London.
- 1802 March 25. Definitive treaty between the above powers signed at Amiens, by Bonaparte, Cornwallis, Azaza and Schimmelpenninck.
- Merino sheep were introduced by R. R. Livingston, and Col. Humphries, and extensively propagated. About the same time the recently extensive cultivation of cotton in the southern states and the more extended use of plaster of Paris as a manure had become so general as to add immensely to the wealth of the United States.
- 1803 March. The king of Great Britain, in consequence of the formidable military preparations in the ports of France and Holland, embodied the militia of the country.
- July. War commenced between France and Great Britain.
- Oct. 11. A treaty of peace was signed between the United States and the emperor of Morocco.
- Louisiana purchased by R. R. Livingston, for the United States, from the French, for \$ 15,000,000.
- 1804 Dec. 3. Bonaparte crowned emperor of France, by his holiness the Pope, by the title of Napoleon I. with great splendor. The emperor presented the Pope a triple crown, valued at 20,000 l.
- Dec. 13. Spain declared war against Great Britain.
- Great hurricane in South Carolina and Georgia.
- 1805 March 4. Thomas Jefferson and George Clinton, inaugurated president and vice president of the United States.
- Samuel Chase, one of the Associate Judges of the United States, having been impeached by the House of Representatives, and tried by the Senate, is HONORABLY acquitted.
- A Botanic garden instituted in Charleston, and a Botanic Society incorporated by the legislature of South Carolina. Botanic gardens were formed about the same time in the vicinity of New York, and Boston. The former by Dr. Hosack, the latter by the University of Cambridge.
- 1806 Captains Lewis and Clarke, returned to St. Louis, after having with the loss of only one man out of 45 traversed the North American continent, from the mouth of the Missouri to the Pacific ocean in 28 months and 10 days, making the whole distance from the confluence of the Missouri and Mississippi to the discharge of the Columbia river into the Pacific ocean, to be 3555 miles in a

A. C.

- line corresponding with the course of these rivers, and in a direct line of about 40 miles from one to the other. The distance between the source and the mouth of the Missouri was 3096 miles.
- 1807 Four seamen are killed on board the American frigate Chesapeake, within the waters of the United States, by order of the British admiral Berkely. The act of Berkely was disavowed by his royal master, and has since been amicably settled between the two governments.
- 1808 A general embargo imposed by law on the United States operates through the whole of the year, to the incalculable injury of the morals and interests of the people.
- A Theological institution was established at Andover, in Massachusetts. Funds for its support to an amount exceeding \$ 110,000 were raised by private subscriptions. From this source provision was made not only for the maintenance of candidates for the ministry, but for adequate salaries to professors in every department necessary to form the complete Theologian and accomplished preacher. Divinity had been regularly taught by professors in Harvard College ever since the year 1722, and in Yale College since 1756, and occasionally in the college of Princeton since 1768. A plan for the instruction of Theological students was devised about the year 1770, by the Reformed Dutch Church, which, though for several years suspended, has been carried into full effect under the direction of Dr. Livingston ever since 1796. An institution of the same kind was formed by the Associate Reformed Synod of North America, and committed to the care of Dr. Mason, which had been in complete operation since the year 1806. In the third year after the institution of the Andover Theological Institution, four of its pupils by name Adoniram Judson jun. Samuel Nott jun. Gordon Hall, and Samuel Newell, magnanimously offered themselves to serve as missionaries to Heathen nations for life, and with Luther Rice, in February 1812, sailed for Calcutta, in expectation of spending their lives in some part of India.
- 1808, 9, 10 Fifteen Bible Societies, composed of Christians of various sects, were formed for the purpose of gratuitously distributing cheap editions of the Bible. Thomas Jefferson declines a reelection as president—James Madison elected his successor.
- 1809 In this and the preceding 19 years upwards of 1200 patents for inventions were issued from the patent office of the United States. There were 2000 post offices in the United States. In 1793 there were only 195. In 1773 only 52.
- 1810 The History of Printing in America was published by Isaiah Thomas. An useful original work, casting great light on the early literature of the English colonies. From this work it appears that "There are in the United States upwards of 169 paper mills. Of these are in New England 66, in Vermont 9, New York 12, Delaware 4, Maryland 3, Virginia 4, Kentucky 6, Tennessee 4, South Carolina 1." In this one, coarse paper is made from corn husks. These mills are constantly employed, and the demand for paper is daily rising. Besides a large number of presses for printing books, "The number of establishments for printing newspapers is about 349. Of these 27 are daily papers. The whole number of newspapers annually circulated in the United States is above 22,000,000. These newspaper establishments are distributed throughout the United States as follows: In New England 62, in Vermont 14, New York 66, New Jersey 8, Pennsylvania 71, Delaware 2, Maryland 21, District of Columbia 6, Virginia 23, North Carolina 10, South Carolina 9, Georgia 13, Kentucky 17, Tennessee 6, Ohio, 14, Indiana Territory 1, Mississippi Territory 4, Orleans Territory 10, Louisiana 1."
- From a census of the nation of Cherokee Indians it appeared that their number is 12,395.
- The emperor of France makes a general seizure of floating American property in European ports subject to his control.
- The manufactory of artificial mineral waters, which had before originated in the middle and northern States, was introduced in Charleston, S. C.
- 1812 March 26. An earthquake, which lasted a minute and a half, destroyed the town or port of Laguna, and city of Carraceas, in Venezuela, (South America,) and from 12,000 to 15,000 people are said to have perished in their ruins. April. An embargo laid by Congress for 90 days; declared by high authority to be the precursor of war with Great Britain.
- April 3. The Washington Benevolent Society of 1500 members celebrate in Boston the inauguration of the Father of his Country, as the first president of the United States.

LIST OF ANCIENT AND MODERN LEARNED AND EMINENT MEN.

[*By the Dates is implied the time when the following Writers died; but when that Period happens not to be known, the Age in which they flourished is signified by fl.*]

B. C.

- 907 HOMER, The first profane writer and Greek poet, flourished.
Hesiod, the Greek poet, supposed to live near the time of Homer.
884 Lycurgus, the Spartan lawgiver.
600 Sappho, the Greek lyric poetess, fl.
558 Solon, lawgiver of Athens.
556 Æsop, the first Greek fabulist.
548 Thales, the first Greek astronomer and geographer.
497 Pythagoras, founder of the Pythagorean philosophy in Greece.
474 Anacreon, the Greek lyric poet.
456 Æschylus, the first Greek tragic poet.
435 Pindar, the Greek lyric poet.
413 Herodotus, of Greece, the first writer of profane history.
407 Aristophanes, the Greek comic poet, fl.
Euripides, the Greek tragic poet.
406 Sophocles, ditto.
Confucius, the Chinese philosopher, fl.
400 Socrates, the founder of moral philosophy, in Greece.
391 Thucydides, the Greek historian.
361 Hippocrates, the Greek Physician.
Democritus, the Greek philosopher.
359 Xenophon, ditto, and historian.
348 Plato, the Greek philosopher, and disciple of Socrates.
336 Isocrates, the Greek orator.
332 Aristotle the Greek philosopher, and disciple of Plato.
313 Demosthenes, the Athenian orator, poisoned himself.
288 Theophrastus, the Greek philosopher, and scholar of Aristotle.
285 Theocritus, the first Greek pastoral poet, fl.
277 Euclid, of Alexandria, in Egypt, the mathematician, fl.
270 Epicurus, founder of the Epicurean philosophy in Greece.
264 Xeno, founder of the stoic philosophy in Greece.
244 Callimachus, the Greek elegiac poet.
208 Archimedes, the Greek geometrician.
184 Plautus, the Roman comic poet.
159 Terence, of Carthage, the Latin comic poet.
155 Diogenes, of Babylon, the stoic philosopher.
124 Polybius, of Greece, the Greek and Roman historian.
54 Lucretius, the Roman poet.
44 Julius Cæsar, the Roman historian and commentator, killed.
Diodorus Siculus, of Greece, the universal historian, fl.
Vitruvius, the Roman architect, fl.
43 Cicero, the Roman orator and philosopher, put to death.
Cornelius Nepos, the Roman biographer, fl.
34 Sallust, the Roman historian.
30 Dionysius of Halicarnassus, the Roman historian, fl.
19 Virgil, the Roman epic poet.
11 Catullus, Tibullus and Propertius, Roman poets.
8 Horace, the Roman lyric and satiric poet.

A. C.

- 17 Livy, the Roman historian.
19 Ovid, the Roman elegiac poet.
20 Celsus, the Roman philosopher and physician, fl.
25 Strabo, the Greek geographer.
33 Phædrus, the Roman fabulist.

A. C.

- 45 Patereulus, the Roman historian, fl.
 62 Persius, the Roman satiric poet.
 64 Quintius Curtius, a Roman historian of Alexander-the Great, fl.
 Seneca, of Spain, the philosopher and tragic poet, put to death.
 65 Læcan the Roman epic poet, ditto.
 79 Pliny the elder, the Roman natural historian.
 93 Josephus, the Jewish historian.
 94 Epictetus, the Greek stoic philosopher, fl.
 95 Quintillian, the Roman orator and advocate.
 96 Statius, the Roman epic poet.
 98 Lucius Florus, of Spain, the Roman historian, fl.
 99 Tacitus, the Roman historian.
 104 Martial, of Spain, the epigrammatic poet.
 Valerius Flaccens, the Roman epic poet.
 116 Pliny the younger, historical letters.
 117 Suetonius, the Roman historian, fl.
 119 Plutarch of Greece, the biographer.
 128 Juvenal, the Roman satiric poet.
 140 Ptolemy, the Egyptian geographer, mathematician, and astronomer, fl.
 150 Justin, the Roman historian, fl.
 161 Ariau, the Roman historian and philosopher, fl.
 167 Justin, of Samaria, one of the oldest Christian authors after the apostles.
 180 Lucian, the Roman philologer and satirist.
 Marcus Aurelius Antonius, Roman emperor and philosopher.
 193 Galen, the Greek philosopher and physician.
 200 Diogenes Laertius, the Greek biographer, fl.
 229 Dion Cassius of Greece, the Roman historian, fl.
 254 Origen, a Christian father of Alexandria.
 Herodian, of Alexandria, the Roman historian, fl.
 258 Cyprian, of Carthage, suffered martyrdom.
 273 Longinus, the Greek orator, put to death by Aurelian.
 320 Lactantius, a father of the church, fl.
 336 Arius, a priest of Alexandria, founder of the sect of Arians.
 342 Eusebius, the ecclesiastical historian and chronologer.
 379 Basil, bishop of Cesarea.
 389 Gregory Nazianzen, bishop of Constantinople.
 397 Ambrose, bishop of Milan.
 415 Macrobius, the Roman grammarian.
 428 Eutropius, the Roman historian.
 524 Boetius, the Roman poet and Platonic philosopher.
 529 Praeopius, of Caesarea, the Roman historian.

ENGLISH, SCOTCH AND IRISH AUTHORS.

A. C.

- 753 BEDE, a priest of Northumberland; history of the Saxons, Scots, &c.
 901 King Alfred; history, philosophy, and poetry.
 1259 Matthew Paris, monk of St. Albans; history of England.
 1292 Roger Bacon, Somersetshire; natural philosophy.
 1308 John Fordun, a priest of Mernshire, history of Scotland.
 1403 Geoffry Chauceer, London; the father of English poetry.
 1404 John Gower, Wales; the poet.
 1535 Sir Thomas More, London; history, politics, divinity.
 1552 John Leland, London; lives and antiquities.
 1568 Roger Ascham, Yorkshire; philology and polite literature.
 1572 Rev. Joseph Knox, the Scotch reformer; history of the church of Scotland.
 1582 George Buchanan, Dumbartonshire; history of Scotland, Psalms of David, Politics, &c.
 1593 Edmund Spenser, London; Fairy Queen, and other poems.
 1615-25 Beaumont and Fletcher; 53 dramatic pieces.
 1616 William Shakespeare, Stratford; 42 tragedies and comedies.
 1617 Sir Walter Raleigh, history of the world.
 1622 John Napier, of Marcheston, Scotland; discoverer of logarithms.
 1623 William Camden, London; history and antiquities.
 1626 Lord Chancellor Bacon, London; natural philosophy and literature in general.
 1634 Lord Chief Justice Coke, Norfolk; laws of England.
 1638 Ben Johnson, London; 53 dramatic pieces.

LEARNED AND EMINENT MEN:

A. C.

- 1638 Joseph Mead, B. D. dissertations on the prophecies, and various learned and critical works.
- 1641 Sir Henry Spelman, Norfolk ; laws and antiquities.
- 1654 John Sheldon, Sussex ; antiquities and laws.
- 1657 Dr. William Harvey, Kent ; discovered the circulation of the blood.
- 1667 Abraham Cowley, London ; miscellaneous poetry.
- 1674 John Milton, London ; *Paradise Lost*, *Regained*, and various other pieces in verse and prose.
Hyde, Earl of Clarendon, Wiltshire ; History of the civil wars in England.
- 1675 James Gregory, Aberdeen ; mathematics, geometry and optics.
Rev. Dr. John Lightfoot ; divinity and criticism.
- 1677 Rev. Dr. Isaac Barrow, London ; natural philosophy, mathematics and sermons.
- 1680 Samuel Butler, Worcestershire ; *Hudibras*, a burlesque poem.
- 1685 Thomas Otway, London ; ten tragedies and comedies, with other poems.
- 1687 Edmund Waller, Bucks ; poems, speeches, letters, &c.
- 1688 Dr. Ralph Cudworth, Somersetshire ; intellectual system.
- 1689 Dr. Thomas Sydenham, Dorsetshire ; History of Physic.
- 1690 Nathaniel Lee, London ; eleven tragedies.
Robert Barclay, Edinburgh ; Apology for the Quakers.
- 1691 Hon. Robert Boyle ; natural and experimental philosophy and theology.
Sir George M'Kenzie, Dundee ; Antiquities and Laws of Scotland.
Rev. Richard Baxter ; divinity.
- 1694 John Tillotson, archbishop of Canterbury, Halifax ; 254 sermons.
- 1697 Sir William Temple, London ; politics and polite literature.
- 1699 Rev. Dr. William Bates, divinity.
- 1701 John Dryden, Northamptonshire ; 27 tragedies and comedies, satiric poems, Virgil.
- 1704 John Locke, Somersetshire ; philosophy, government, and theology.
- 1705 John Ray, Essex ; botany, natural philosophy, and divinity.
- 1707 George Farquhar, Londonderry ; eight comedies.
- 1713 Ant. Ash Cooper, Earl of Shaftesbury ; characteristics.
- 1714 Gilbert Burnet, Edinburgh, bishop of Salisbury ; history, biography, divinity, &c.
- 1718 Nicholas Rowe, Devonshire ; seven tragedies, translation of Lucan's *Pharsalia*.
- 1719 Rev. John Flamsteed, Derbyshire ; mathematics and astronomy.
Joseph Addison, Wiltshire ; *Spectator*, *Guardian*, poems, politics.
Dr. John Keil, Edinburgh ; mathematics and astronomy.
- 1721 Matthew Prior, London ; poems and politics.
- 1724 William Wollaston, Staffordshire ; Religion of Nature delineated.
- 1727 Sir Isaac Newton, Lincolnshire ; mathematics, geometry, astronomy, optics.
- 1729 Rev. Dr. Samuel Clarke, Norwich ; mathematics, divinity, &c.
Sir Richard Steele, Dublin ; four comedies, papers in *Tatler*, &c.
William Congreve, Staffordshire ; seven dramatic pieces.
- 1732 John Gay, Exeter ; poems, fables, and eleven dramatic pieces.
- 1734 Dr. John Arbuthnot, Mearnsire ; medicine, coins, politics.
- 1742 Dr. Edmund Halley ; natural philosophy, astronomy, navigation.
Dr. Richard Bentley, Yorkshire ; classical learning, criticism.
- 1744 Alexander Pope, London ; poems, letters, translation of Homer.
- 1746 Rev. Dr. Jonathan Swift, Dublin ; poems, politics and letters.
- 1747 Colin M'Laurin, Argyleshire ; algebra, view of Newton's philosophy.
- 1748 James Thomson, Roxburgshire ; Seasons, and other poems, five tragedies.
Rev. Dr. Isaac Watts, Southampton ; logic, philosophy, psalms, hymns, sermons, &c.
- Dr. Francis Hutcheson, Ayrshire ; system of moral philosophy.
- 1750 Rev. Dr. Convers, Middleton, Yorkshire ; Life of Cicero, &c.
Andrew Baxter, Old Aberdeen ; metaphysics and natural philosophy.
- 1751 Henry St. John, lord Bolingbroke, Surry ; philosophy, metaphysics and politics.
Dr. Alexander Monro, Edinburgh ; anatomy of the human body.
- 1754 Dr. Richard Mead, London ; on poisons, plague, small-pox, medicine, precepts.
Henry Fielding, Somersetshire ; Tom Jones, Joseph Andrews, &c.
- 1755 Dr. Nathaniel Lardner, History of the Apostles and Evangelists, writers of the New Testament, Credibility, &c.
- 1757 Colley Cibber, London ; 25 tragedies and comedies.
- 1761 Thomas Sherlock, bishop of London ; 69 sermons, &c.
Benjamin Hoadley, bishop of Winchester ; sermons and controversy.
Samuel Richardson, London ; *Grandison*, *Clarissa*, *Pamela*.
Rev. Dr. John Leland, Lancashire ; Answer to Deistical writers.
- 1765 Rev. Dr. Edward Young ; *Night Thoughts*, and other poems, 3 tragedies.
Robert Simson, Glasgow ; conic sections, Euclid, *Appollonius*.
- 1768 Rev. Lawrence Sterne ; 45 sermons, *Sentimental Journey*, *Tristram Shandy*.

A. C.

- 1769 Robert Smith, Lincolnshire ; harmonics and optics.
- 1770 Rev. Dr. Jortin ; Life of Erasmus, Ecclesiastical History and sermons.
Dr. Mark Akenside, Newcastle upon Tyne ; poems.
- Dr. Tobias Smollett, Dunbartonshire ; History of England, novels, translations.
- 1771 Thomas Gray, Professor of Modern History, Cambridge ; poems.
- 1773 Philip Dormer Stanhope, Earl of Chesterfield ; letters.
George Lord Lyttleton, Worcestershire ; History of England.
- 1774 Oliver Goldsmith ; poems, essays, and other pieces.
Zachary Pearce, bishop of Rochester ; Annotations on the New Testament, &c.
- 1775 Dr. John Hawkesworth ; essays.
- 1776 David Hume, Mearse ; History of England, and essays.
James Ferguson, Aberdeenshire ; astronomy.
- 1777 Samuel Foote, Cornwall ; plays.
- 1779 David Garrick, Hereford ; plays, &c.
William Warburton, bishop of Gloucester ; Divine Legation of Moses, and various other works.
- 1780 Sir William Blackstone, chief justice, London ; Commentaries on the Laws of England.
Dr. John Fothergill, Yorkshire ; philosophy and medicine.
- James Harris, Hermes ; Philological Inquiries, and Philosophical Arrangements.
- 1782 Thomas Newton, bishop of Bristol, Litchfield ; discourses on the prophecies and other works.
Sir John Pringle, Bart. Roxboroughshire ; Diseases of the Army.
- Henry Home, Lord Kames, Scotland ; Elements of Criticism, Sketches of the History of Man.
- 1783 Dr. William Hunter, Lanarkshire ; anatomy.
Dr. Benjamin Kennicott, Devonshire ; Hebrew Bible, dissertations, &c.
- 1784 Dr. Samuel Johnson, Lichfield ; English Dictionary, biography, essays, poetry, died Dec. 13, aged 71.
- 1785 Rev. Richard Burn, LL. D. author of the Justice of Peace, Eccles. Law, &c. died Nov. 20.
Richard Glover, Esq. Leonidas, Medea, &c. died Nov. 25.
- 1786 Jonas Hanway, Esq. Travels, miscellanies, died Sept. 5, aged 74.
- 1787 Dr. Robert Lowth, bishop of London ; criticism, divinity, grammar, died Nov. 3.
Soame Jenyns, Esq. Internal Evidence of the Christian Religion, and other pieces ; died Dec. 18.
- 1788 James Stuart, Esq. celebrated by the name of " Athenian Stuart ;" died Feb. 1.
Thomas Gainsborough, Esq. the celebrated painter, died Aug. 2.
- Thomas Sheridan, Esq. English Dictionary, works on education, elocution, &c. died Aug. 14.
- 1789 William Julius Mickle, Esq. Cumberland ; translator of the Lusiad, died Oct. 25.
- 1790 Dr. William Cullen, Scotland ; Practise of Physic, Materia Medica, died Feb. 5.
Dr. Adam Smith, Scotland ; Moral Sentiments, Inquiry into the Wealth of Nations, died April 17.
- John Howard, Esq. Middlesex ; Account of Prisons, Lazarettos, &c.
- Rev. Thomas Warton, B. D. poet laureat ; History of English Poetry, poems, died April 21.
- 1791 Rev. Dr. Richard Price, Glamorganshire ; on Morals, Providence, Civil Liberty, Annuities, Reversionary payments, Sermons, &c. died Feb. 19, aged 68.
Dr. Thomas Blacklock, Annandale ; poems, Consolations from natural and revealed Religion, died July, aged 70.
- 1792 Sir Joshua Reynolds, Devonshire ; President of the Royal Academy of Painting ; Discourses on Painting delivered before the Academy, died Feb. 23, aged 68.
- 1793 Rev. Dr. William Robertson, Principal of the University of Edinburgh, and Historiographer to his majesty for Scotland ; History of Scotland, of the Reign of Charles V. History of America, and Histo. Disquisition concerning India, died June 11, aged 72.
- 1794 Dr. George Campbell, Aberdeen ; Rhetoric, Dissertation on Miracles.
Edward Gibbon, Esq. Surry ; History of the decline and fall of the Roman Empire, died Jan. 16.
- 1795 Dr. Andrew Kippis, author of Cook's Voyages, Life of Doddridge, &c.
Sir William Jones, one of the Judges of India, and President of the Asiatic Society, several law tracts, translation of Isus, and of the Moallakat, or seven Arabian Poems, and many valuable papers in Asiatic researches.
- 1796 Robert Burns, the Scotch poet, died July 21.
James Fordyce, D. D. Addresses to young people, Sermons, &c. died Oct. 1.
- 1797 Edmund Burke, Esq. Sublime and Beautiful, traits on the French Revolution.
- 1799 W. Melmoth ; Translations of Pliny's and Cicero's Letters, Fitzoshorne's Letters, &c.

A. C.

- Lord Monboddo ; origin and progress of language.
 1800 Dr. Hugh Blair : Sermons, Rhetoric, and Belles Lettres.
 Rev. William Mason, two tragedies, Odes, &c. died April 5.
 William Cowper, Poems, translation of Homer, &c. died April 25.
 1802 Henry Hunter, D. D. Sacred Biography, translation of Lavater, St. Pierre, &c.
 died Oct. 27.
 1812 Horne Tooke, History, Philology, died March.

OTHER EUROPEAN AUTHORS.

- 980 AVICENNA, the Mahometan philosopher and physician.
 1118 Anna Commena ; Alexiad, or life of her father Emperor Alexias Comnenus.
 1206 Averroes, Corduba, the Arabian philosopher.
 1321 Dante, Florence ; poetry.
 1374 Petrarch, Arezzo in Italy ; poetry.
 1576 Boccace, Tuscany ; the Decameron, poems, &c.
 1481 Platina, Italy ; Lives of the Popes, &c.
 1502 Montaigne, Perigord in France ; essays.
 1509 Philip de Comines, Flanders ; historical memoirs.
 1517 Martin Luther, the Great Reformer, fl.
 John Calvin, do. fl.
 1530 Machiavel, Florence ; politics, comedies, &c.
 1534 Ariosto, Lombardy ; Orlando Furioso, and five comedies.
 1536 Erasmus, Rotterdam ; Colloquies, Praise of Folly, &c.
 1540 Guicciardini, Florence ; History of Italy.
 Copernicus, Thorn in Prussia ; astronomy.
 1549 Michael de Cervantes, Saavedra Alcala in Spain ; Don Quixote, &c.
 1566 Hannibal Caro, Civita Nuova ; poems and translations.
 Vida, Cremona ; art of poetry, and other didactic poems.
 1579 Camoens, Lisbon ; the Lusiad, an epic poem.
 1590 Davila, Isle of Cyprus ; history of the civil wars of France.
 1595 Torquato Tasso, Italy ; Jerusalem Delivered, an epic poem, Aminta, &c.
 1605 Ulysses Aldrovandus, Bologna ; natural history.
 1608 Mendez, Castile ; history of China, fl.
 1612 Battista Guarini, Ferrara ; the Faithful Shepherd, a pastoral poem.
 1623 Father Paul Sarpi, Venice ; History of the Council of Trent, Rights of Sovereigns and Subjects, letters, &c.
 1624 John Mariana, Castile ; History of Spain.
 1625 John Baptist Marino, Naples ; poetry.
 1627 Lewis de Congora, Cordova ; poetry and plays.
 1628 Francis de Malherbe, Normandy ; poetry.
 1630 John Kepler, Wittemberg ; astronomy.
 1635 Trajan Boccolini, Rome ; satirical pieces, fl.
 1645 Hugo Grotius ; commentaries on the scriptures, jurisprudence.
 1646 Lewis Veliz de Guevera, Andalusia ; comedies.
 1650 Des Cartes, Touraine ; philosophy and mathematics.
 1654 John Lewis de Balzac, Angouleme ; letters, &c.
 1655 Peter Cassendi, Provence ; astronomy.
 1662 Pascal, Auvergne ; Thoughts upon Religion, &c.
 1673 Moliere, Paris ; comedies.
 1675 James Robault, Amiens ; physics.
 1680 Francis, Duke of Rochefoucault, France ; maxims.
 Dr. Lewis Moretti, Provence ; Historical Dictionary.
 1683 Mezeray, Lower Normandy ; Abridgment of the history of France.
 1684 Peter Corneille, Rouen ; thirty dramatic pieces.
 1689 Dr. Bonet, Geneva ; medicine.
 1692 Giles Menage, Angers ; philology, miscellanies in verse and prose.
 1694 Antonietta de la Garde Des Houlieres, Paris, poetry.
 Marcellus Malpighi, Bologna ; discovered the circulation of the sap in plants.
 Puffendorf, Upper Saxony ; jurisprudence and history.
 1695 D'Herbelot, Paris ; Bibliotheque orientale.
 Huygens, Hague ; mathematics and astronomy.
 1696 John de la Bruyere, France ; characters.
 Marchioness de Sevigne, France ; letters.
 1699 John Racine, France ; tragedies.
 1703 Muscaton, Marseilles ; funeral orations.

A. C.

- 1704 Bocconi, Palermo ; natural history.
 Bousset, Dijon ; discourse upon universal history, funeral orations, &c.
 Bourdaloue, France ; Sermons.
- 1706 Baillet, Picardy ; Judgments of the Learned, biography, &c.
- 1707 Rev. James Saurin ; sermons, tracts, fl.
- 1709 Thomas Corneille, brother to Peter ; tragedies.
- 1710 Flechier, Avignon ; sermons, funeral orations, &c.
- 1712 Boileau, Paris ; satires, epistles, art of poetry ; the Lutrin, &c.
 Cassini, Italy ; astronomy.
- 1715 Malebranche, Paris ; philosophy.
- 1716 Francis de Salignac de la motte Fenelon, archbishop of Cambray, Perigord ; Telemachus, Dialogues of the Dead, Demonstration of the Being of God, &c.
 Leibnitz, Leipsick ; philosophy, &c.
- 1720 Madame Dacier, France ; translation of Homer, Terence, &c.
- 1723 Henry, Paris ; history.
 Bayle, Foix ; Historical and Critical Dictionary.
- 1725 Rapin de Thoyras, Languedoc ; history of England.
- 1728 Father Daniel, Rouen ; history of France.
- 1735 Vertot, France ; Revolutions of Rome, Portugal, Sweden, &c.
- 1758 Dr. Boerhave, Leyden ; botany, &c.
- 1741 Rollin, Paris ; history, Belles Lettres.
 John Baptist Rousseau, Paris ; odes, epistles, epigrams, comedies, letters.
 Le Sage, Bretany ; Gil Blas, &c.
- 1743 Masillon, France ; Sermons.
- 1755 Montesquieu, Bourdeaux ; Spirit of laws, Graadeur and Declension of the Romans, Persian letters, &c.
- 1757 Reaumur, Roche'le ; natural history of insects.
- 1767 Muratori, Italy ; history, antiquities.
 Metastasio, Italy ; dramatic pieces, fl.
- 1778 Voltaire, Paris ; the Henriad, an epic poem, dramatic pieces, poetry, history, literature in general.
- 1788 The Count De Buffon, Paris ; natural history.
- 1794 Marquis de Beccaria ; Dissertations on Crimes and Punishments.
- 1796 Abbe Raynal ; history of the Indies.

INDEX TO VOL. II.

Page.		Page.	
Aalborg	163	Alexandria	732
Aar river	339	Algieri	408
Aarhuus	163	Algiers	716
Aberdeen	104	city	718
university	102	Alhambra palace	348
Abo university	176	Alicant	359
Abyssinia	747	Allahabad	585
Achill island	142	Alps	339
Acirs or snowy hurricanes of France	279	Alsen island	167
Adam's bridge	582	Altai mountains	22
Adel kingdom		Altan Nor Lake	467
Adige river	385	Alten river	145
Adrianople	422	Altona	162
Ægatian islands	407	Amboyna island	673
Ætna mount	405	Amedabad	590
Africa	701	Amelandt island	241
Agimere	586	Amiens	269
Agra	585	Amoor river	20
Agriculture and soil of Abyssinia	752	Amsterdam	265
Algiers	720	Amu river	636
Arabia	653	Andrews, St. university	102
Austria	327	Andros island	482
Birman Empire	542	Angers	270
Ceylon	598	Angola kingdom	769
Denmark	165	Angora	444
Egypt	738	Anhalt, House of	503
England	76	Annan kingdom	516
France	277	river	109
Good Hope, cape of	765	Annobon island	791
Hindostan	572	Anspach	307
Holland	288	Antiparos grotto	429
Japan	530	Antiparos island	433
Ireland	136	Antwerp	244
Italy	384	harbour	272
Naples	399	Antiquities of Austria	316
Nepaul	515	China Proper	478
Netherlands	248	Chinese Tartary	497
Norway	152	Denmark	158
Persia	617	England	36
Portugal	378	Egypt	728
Prussia	225	France	258
Russia in Europe	205	Germany	289
Russia in Asia	465	Hindostan	566
Scotland	109	Holland	232
Siam	553	Japan	522
Sicily	404	Ireland	128
Spain	361	Persia	605
Sweden	180	Poland	214
Switzerland	338	Prussia	220
Tartary Chinese	500	Russia in Europe	194
Tibet	510	in Asia	459
Turkey	448	Scotland	95
Ajan	753	Spain	347
Aland isles	184	Sweden	171
Aleppo	443	Switzerland	335
Alessandria	390	Turkey in Asia	442

INDEX

819

Page.		Page.	
Antiquities of Turkey in Europe	414	Babylon, its ruins	445
Appenines	386	Badakshan	636
Arabia	640	Baden	308
original population of	641	Baedoo	779
progressive geography of	641	Bagdad	445
Arabian sea	13	Bahrin isle	658
Aral sea	637	Baikal sea	16
Ararat mountain	451	Baktegan lake	619
Architecture of Ireland	185	Balbec	442
Ardra kingdom	771	Balk	635
Aremberg, duchy of	303	Baltic sea	11
Arkeeko	751	Bambara	778
Army of Abyssinia	750	Banda or Lantor island	674
Algiers	717	Banna river	137
Austria	318	Barabin stepp	468
Birman Empire	538	Barca	722
China Proper	483	Barcelona	355
Chinese Tartary	498	Bari	399
Denmark	159	Barra kingdom	777
England	49	Barrow river	137
Egypt	731	Basil or Basle	337
France	261	Basra or Basora	445
Gangetic Hindostan	583	Batchian island	672
Germany	290	Bavaria	306
Holland	233	Bayonne	272
Japan	525	Bayreuth, principality of	309
Ireland	131	Beeroo	782
Italy	393	Belfast	134
Morocco	704	Belgrade	423
Naples	397	Bellisle	285
Norway	150	Belur mountains	637
Poland	215	Benbecula isle	123
Portugal	372	Benares	586
Prussia	221	Bengal, bay of	13
Russia in Europe	196	Benguela kingdom	768
Siam	549	Benin kingdom	770
Sicily	401	Ben Nevis mountain	114
Spain	350	Berelos lake	739
Sweden	174	Bergamo	594
Switzerland	336	Berg, grand duchy of	302
Turkey in Europe	417	river	766
Arno river	385	Bergen	151
Arran islands	120, 142	Berhamptoor river	710
Arras	245	Berlin	222
Arroo isles	682	Berra isle	123
Ascension island	791	Besancon	270
Asia	434	Beveland islands	240
original population of	435	Bhatgung	515
progressive geography of	439	Biafra kingdom	770
Asphaltites lake	449	Bielo-Ozero or White lake	208
Asti	390	Birman Empire	533
Astracan	462	original population of	534
Atbara river	752	progressive geography of	534
Athinia or Setines	424	Biscay, bay of	13
Athos mount	428	Bissagos island	790
Atlas mountains	26	Bissao island	790
Augila	785	Bistan	614
Augsburg	307	Blackwater river	137
Aur	105	Bleeda	719
Australasia	674	Blocksberg mountains	293
Austria	309	Boden Zee	339
original population of	312	Bog or Bogue river	206
progressive geography of	312	Bogs of Ireland	139
Ava	539	Bokhara	635
Axum	751	Bologna	304
Azof sea	11	Bombay	590
town	463	Bondau	780
Babelmandel	15	Bootan	512

INDEX.

	Page		Page
Borneo island	667	Cairo	732
Bornholm island	167	Cambay	590
Botany of Arabia	655	Cambodia	516
Australasia, and Polynesia	698	Cambrey	246
Austria	330	Cambridge university	57
Birman Empire	541	Campbeltown	106
China Proper	493	Canals of France	274
Chinese Tartary	501	Canaries	789
Denmark	166	Saudia	429
Egypt	739	Canea	431
England	81	Cantabrian chain of mountains	363
France	280	Canton	487
Germany	294	Cape of Good Hope	756
Hindostan	578	Cape town	759
Holland	240	Cape Verd islands	790
Japan	531	Cardona mountain	365
Ireland	139	Carlsberga	177
Italy	386	Carolines isles	690
Lapland	145	Carpathian mountains	329
Morocco	715	Carthage, ruins of	724
Persia	621	Carthagena	358
Portugal	379	Cashgar	499, 627
Prussia	226	Cashmir	588
Russia in Europe	209	Caspian Sea	16
Russia in Asia	469	Cassel	299
Scotland	116	Catania	403
Sicily	406	Catacombs of Egypt	728
Spain	365	Catmandu	515
Sweden	181	Caucasian mountains	450, 467
Switzerland	340	Caveri river	576
Turkey in Europe	428	Celebezian isles	669
Turkey in Asia	452	Central Hindostan	590
Bourbon island	791	Ceram island	671
Bordeaux	268	Cerigo	410
Boulogne	271	Cephalaria	410
Bournou	782	Cevennes chain of mountains	278
Bouro island	671	Ceuta or Cibtu	709
Boyne river	137	Ceylon island	596
Braga	376	Character and manners of Abyssinia	750
Brandenburgh	223	Algers	717
Breede river	766	Arabia	646
Brenen	305	Austria	320
Brescia	394	Birman Empire	538
Breslau	228	Bucharia	634
Brest	271	Ceylon	597
Briare canal	274	China Proper	483
Bridges of England	68	Chinese Tartary	498
British Empire	30	Denmark	160
possessions in Hindostan	583, 592	Egypt	731
Brody	325	England	52
Brunn	324	France	264
Brunswick	300	Good Hope, cape of	739, 761
Bruges	245	Hindostan	568
Brussels	244	Holland	233
Bucharia, Great	634	Japan	525
Bucharest	423	Ireland	131
Buda	324	Lapland	144
Bundamir river	618	Nepaul	513
Burrampooter river	510, 573, 21	Netherlands	244
Bute island	120	New-Holland	676
Cabul	589	Norway	150
Cadiz	356	Persia	610
Cadsand island	240	Poland	215
Caen	270	Portugal	372
Caffa, straits of	15	Prussia	221
Caffers	756	Russia in Europe	197
Cagliari	408	Siam	550
Calcutta	584	Sicily	403

	Page		Page
Scotland	99	Tartary, Independent	680
Spain	350	Tibet	508
Sweden	175	Turkey in Europe	425
Switzerland	336	Turkey in Asia	447
Tartary, Independent	629	Congo kingdom	769
Tibet	507	Constance lake	839
Turkey in Europe	418	Constantinople	421
Turkey in Asia	448	straits of	15
Cherbourg	278	Copenhagen	162
Cherso	395	Copper mine of Fahlum	183
China Proper	476	Roras	154
original population of	476	Cordova	359
progressive geography of	476	Corea kingdom	503
China Sea	14	Corfu fortifications of	262
Chiuese Empire	473	town of	410
Tartary	495	Corinth, isthmus of	427
original population of	496	Cork	133
progressive geography of	496	Corrib lake	137
Christiana	151	Corsica	283
Christiansand	151	Cos or Coos island	455
Ciampa	517	Cosseir	735
Cirkutz lake	383	Cossacks	191
Cirtipour	515	Courtra or Cortrick	246
Clara river	180	Courts of Denmark	159
Clermont	270	Cracow	324
Clausenburgh	825	Cremona	395
Cobi desert	25	Cronstadt	200
Cochin	594	Curiosities natural of Arabia	657
Cochin China	517	Austria	333
Coimbra	377	England	87
Coimbra university	374	France	283
Colair lake	576	Hindostan	582
Cologne	269	Ireland	141
Colombo	598	Norway	155
Colonies of France	261	Prussia	227
Comingo isle	410	Russia	212
Comora islands	792	Scotland	119
Commerce and manufactures of		Switzerland	341
Algiers	719	Turkey in Europe	429
Arabia	652	Curisch Haff	226
Austria	326	Customs. See character	
Abyssinia	751	Cyprus island	455
Birman Empire	541	Dacca	585
Buchari	636	Dahl river	180
Ceylon	598	Dalmatian isles	395
China Proper	489	Damietta	734
Chinese Tartary	500	Damascus	443
Denmark	164	Danish Empire	147
England	70	Dantzig	305
Egypt	736	Danube river	22
France	275	Dardanelles	15, 427
Good Hope, Cape of	761	Dehnetzin	324
Hindostan	571	Delft	257
Holland	237	Delhi	585
Ireland	185	De la Goa	756
Japan	528	Denmark	155
Lapland	144	original population of	156
Norway	152	progressive geography of	156
Netherlands	247	Derbent	613
Persia	615	Derne	725
Portugal	577	Deserts of Arabia	655
Prussia	223	Europe	24
Russia	202	Persia	620
Scotland	107	Dieppe	272
Siam	552	Dnieper river	205
Sicily	404	Dollart bay	239
Spain	360	Don river	206
Sweden	178	Dort or Dordrecht	236

INDEX.

Page.		Page.	
Douay	245	Ephesus	424
Douro river	363	Erivan	613
Dever strait	15	Erlau	825
Draha river	713	Ern lake	137
Dresden	297	Erzgebirge mountains	293
Drin	426	Euphrates river	448
Droutheim	151	Europe	26
Dublin	183	Euxine sea	11
Dublin university	132	Evora	377
Dumfries	105	university	374
Dundalk	134	Eyder river	165
Dundee	104	Fahlun	178
Dunfermline	105	Falster island	166
Dunkeld	105	False Bay	767
Dunkirk	245	Femeren island	167
Durra sea	619	Feloops	775
Dusky Bay	687	Fernando Po island	790
Dwina river	207	Ferrara	395
Eastern Continent	9	Ferrol	358
Eboes negroes	772	Ferro islands	167
Ebro river	362	Ferro or Hierro island	790
Ecclesiastical Geography of Ireland	130	Fez or Fas, city of	706
Ecija	359	Fezzan	783
Edifices of Arabia	652	Fillely river	713
Austria	326	Fingal's cave, or grotto	121
Birman Empire	541	Finns	190, 192
China Proper	488	Fish river	766
Denmark	183	Florence	389
France	273	Folmund lake	153
Japan	528	Foolado	780
Netherlands	246	Foota Jallo	778
Persia	615	Foota Torra	780
Portugal	377	Formosa island	494
Prussia	223	Forests of Austria	329
Siam	552	Birman Empire	543
Spain	360	Ceylon	699
Sweden	178	China Proper	493
Tibet	508	Denmark	166
Edinburgh	103	England	80
university	102	France	280
Education of Austria	322	Germany	294
China Proper	486	Hindostan	577
Denmark	161	Japan	531
England	56	Morocco	713
France	266	Netherlands	248
Holland	284	Norway	153
Japan	527	Persia	620
Ireland	132	Prussia	226
Norway	151	Russia in Europe	209
Persia	611	Russia in Asia	468
Prussia	222	Scotland	116
Russia	199	Sweden	181
Scotland	191	Tibet	511
Sweden	176	Turkey in Europe	428
Switzerland	337	Turkey in Asia	452
Egypt	726	Forth river	109
El-Aice	746	Forteventura	789
Elba island	285	Fort William College	583
Elbe river	291	Foulahs	779
Elbing	223	Foulahs, Southern	774
Elko lake	739	Foyle river	137
Elvas	376	France	255
Enara lake	145	original population of	256
Engia gulf	426	progressive geography of	256
England	31	Frankfort	223
list of the kings of	45	on the Mayn	309
English channel	15	Fredericksnall	152
Enontekis	144	French Empire	249

INDEX.

323

Page

Erench possessions in Italy	387	Ireland	130
Friendly isles	696	Italy in general	384
Frisch Haff	226	Italy, kingdom of	393
Fulda, principality of	305	Lapland	143
Funen island	156	Morocco	703
Fusi mountain	530	Naples	397
Gademis	785	Nepaul	514
Gagra river	574	Netherlands	244
Galway	134	Norway	149
Gambia river	774	Persia	608
Ganges river	21, 572	Poland	214
Gangetic Hindostan	582	Portugal	371
Garonne river	278	Prussia	221
Gaudiana river	363	Russia	195, 460
Gawritz river	766	Scotland	98
Gauts	572, 577	Siam	549
Gefle	178	Sicily	401
Geneva	342	Spain	349
lake	339	Sweden	172
Genoa	389	Switzerland	335
George's, St. channel	15	Tibet	506
Germany	268	Turkey in Europe	416
original population of	268		410
progressive geography of	288	Gozza isle	
German ocean	14	Grampian Hills	113
Ghent	245	Grain Coast	773
Ghizni or Gasna	589	Granada	357
Giants' Causeway	141	Grande river	774
Gibraltar fortress	368	Gratz	324
Gibraltar straits	15	Great river	766
Gilolo island	670	Groningen	236
Girgeh	735	Greenock	105
Glamme river	152	Guadarana mountains	364
Glaciers of the Alps	341	Guadalquivir river	363
Glasgow	103	Guernsey isle	89
university	102	Guinea kingdom	770
Gluckstadt	163	Guinea proper	771
Goa	594	Gulden river	165
Godaveri river	575	Gypsies	320
Gold coast	771	Haerlem	236
Gomera island	790	sea of	240
Gondar	751	Hæmus chain of mountains	427
Good Hope cape of	756	Hague	235
Goree island	790	Hainan island	494
Gotha river	180	Hamburg	304
Gothenburg	177	Hanover	301
Gothland island	184	Hanoverian states	300
Göttingen	300	Hanseatic League	304
Gotto	779	Havre	272
Government of Abyssinia	747	Havre, fortifications of	262
Algiers	717	Hebudes	120
Arabia	646	Helena, St. island	791
Austria	317	Helena, St. bay	766
Asia	440	Helicon mount	428
Birman Empire	537	Herbagi	746
China Proper	481	Hermanstadt	325
Chinese Tartary	497	Hesse, grand duchy of	302
Denmark	158	Hildesheim	300
Egypt	729	Himmalech mountains	515, 576
England	43	Hindostan	557
Europe	29	original population of	568
France	260	progressive geography of	563
Germany	290	Central	590
Good Hope, cape of	758	Gangetic	582
Gangetic Hindostan	583	Sindetic	587
Hindostan	563	Southern	592
Holland	232	Hirta or St. Kild isle	122
Japan	514	Historical Epochs of Algiers	716
		Arabia	612

INDEX.

	Page		Page
Historical Epochs of Austria	312	Ilmen lake	208
Birman Empire	534	Indus river	574
Bucharia	633	Inhambane	756
China Proper	477	Inn river	328
Chinese Tartary	497	Innspruek	307
Denmark	157	Inverness	106
Egypt	726	Johnkioping	178
England	36	Jordan river	449
France	257	Ionian Republic	410
Germany	288	Ireland	126
Good Hope, cape of	757	original population of progressive geography of	126 127
Hindostan	563	Irkutsk	463
Holland	230	Irrawady river	542
Japan	521	Iron mines of Norway	154
Ireland	127	Ischia island	399
Italy in general	382	Isefiord bay	166
Italy kingdom	391	Isenberg principality	305
Morocco	705	Isle of Man	90
Naples	396	Wight	88
Nepaul	514	Ispahan	611
Netherlands	243	Issimstepp	628
Norway	149	Italy in general	380
Persia	603, 605	original population of French territory within kingdom of	382 387 390
Poland	214	Judicature of England	45
Portugal	370	Jumna river	574
Prussia	219	Jura island	120
Russia in Europe	194	Juggernaut	591
in Asia	458	Ivica island	367
Scotland	94	Ivory coast	771
Siam	549	Kaarta	778
Sicily	400	Kajaaga	780
Spain	346	Kalmuks, stepp of	468
Sweden	170	Kamschatka sound	13
Switzerland	384	Kandi	597
Tibet	506	Karroo desert	764
Tartary, Independ.	627	Kasoan	778
Turkey in Asia	442	Karskoi channel	14
in Europe	414	Kemi mountains	145
Hoang-ho river	17	Kerun Lake	739
Holland	228	Kesem or Keschin	651
original population of progressive geography of	229	Kharism	631
Horses of Arabia	656	Khiva	632
Horticulture of England	77	Kiamku river	17
Houssa	782	Kiel	163
Humber river	77	university	162
Hydrabad	595	Kilkenny	135
Jaen	359	Killarney lake	138, 141
Jago, St. di Compostella	359	Kiou	200
Jaloss	780	Kirgusians	628, 630
Jallonkhas	478	Kistna river	576
Janna	423	Kizil Irmak	449
Japan	520	Kola	144
original population of progressive geography of	521	Kolen mountains	145, 153
sea	14	Kolyvan	463
Jaroslau	201	Kom	614
Java island	665	Kong kingdom	778
sea	14	Kongsberg silver mines	
Icolmkill	121	Konigsberg	223
Ida mount	451	Koramantyn's negroes	772
Jedburgh	105	Kurilian isles	473
Jedda	651	Ladoga lake	16
Jedo	527	Ladrones isles	689
Jenne	779	Lahore	587
Jersey isle	89	Lahsa	651
Jerusalem	446	Language of Arabia	648
Na island	120		

INDEX.

825

	Page.		Page.
Language of Austria	321	Limerick	134
Birman Empire	539	Limmat river	339
China Proper	485	Lindau	307
Chinese Tartary	499	Linz or Lintz	325
Denmark	161	Lipari islands	406
Egypt	732	Lippe, House of	304
England	54	Lisbon	375
France	265	Lisle	245
Germany	291	Literature of Arabia	648
Hindostan	568	Austria	322
Holland	234	Birman Empire	539
Japan	527	Chinese Tartary	499
Ireland	132	Denmark	161
Italy	384	England	55
Lapland	144	France	265
Malaya	545	Germany	289, 291
Morocco	705	Hindostan	569
Netherlands	244	Holland	234
New Holland	678	Japan	527
Norway	151	Ireland	132
Persia	611	Nepaul	514
Poland	215	Portugal	373
Portugal	373	Prussia	222
Prussia	222	Russia in Europe	198
Russia in Europe	198	Scotland	101
in Asia	462	Siam	551
Scotland	100	Sicily	402
Siam	551	Spain	553
Spain	553	Sweden	175
Sweden	175	Switzerland	337
Switzerland	337	Tibet	507
Turkey in Europe	420	Turkey	420
Languedoc canal	274	Liverpool	60
Laos country	555	Livonians	192
Laos people	556	Loango kingdom	769
Lapland	143	Loch Linne	111
original population of	143	Loch Awe	111
Larissa	423	Loch Ericht	112
Lassa	508	Loch Lochy	111
Lausanne	338	Loch Shin	112
Laws of Austria	317	Loch Tay	112
Birman Empire	537	Loire river	277
China Proper	481	Lomond lake	111
Denmark	158	London	58
Hindostan	567	Londonderry	134
Holland	233	Lorca	359
Japan	524	Low Countries	227
Norway	149	Lubec	305
Russia	196	Lucca	390
Siam	549	Lucknow	585
Scotland	99	Ludamar	782
Spain	349	Lund university	176
Lead hills of Scotland	113	Luxemburg	246
Lebanon mountain	451	Luzon isle	668
Leghorn	389	Lymford bay	166
Leipsig	297	Lyons	269
Lelit Pattan	515	Lys river	248
Lemberg or Leopold	324	Madagascar	786
Lemnos island	437	Madeira	788
Leoo Keo isles	520	Madras	593
Lena river	17	Madrid	854
Lepanto, gulf of	426	Madura	666
Lewis isle	123	Macander river	449
Leuwarden	236	Macstricht	246
Leyden	236	Magadexo kingdom	754
Leyen	309	Magdeburg	299
Liechtenstein	309	Maggione lake	385
Liffy river	157	Majoreca island	367

INDEX.

	Page.		Page.
Makian islands	672	Mineralogy and mineral waters of	
Malaga	358	Lapland	146
Malaya or Malacea	545	Morocco	715
Malagueta	773	Nepaul	516
Malines or Mechlin	246	Netherlands	248
Mastrom whirlpool	155	New-Holland	679
Malta	409	Norway	153
Religion	ib.	Persia	622
Population	ib.	Portugal	380
Man, isle of	90	Prussia	227
Manchester	61	Russia in Europe	211
Manianana	779	Russia in Asia	471
Manding kingdom	778	Scotland	115, 118
Mandingoes	775	Siam	555
Manillas, or Philippine islands	668	Sicily	406
Manners. See Character		Spain	366
Mantua	395	Sweden	182
Maritz	426	Switzerland	341
Marmora, Sea of	10	Tibet	511
Margenesas isles	692	Turkey in Europe	429
Marseilles	268	Turkey in Asia	453
Martaban	541	Modena	394
Masuah	751	Moen island	166
Matthew St. island	791	Mosodor	708
Mauritius island	791	Moucecas	670
Mayn river	292	Mombaza kingdom	754
Mecca	650	Mondori	390
Medina	650	Monomotapa kingdom	755
Mediterranean Sea	10	Monsoons	572
Mecklenburg, House of	302	Mons	245
Meinam river	554	Montpellier	270
Meler lake	180	Montserrat	364
Melilla	709	Moors	781
Melinda kingdom	754	Morocco	702
Menzala lake	739	city of	706
Mersey river	77	Mortay island	671
Megnino	707	Mosambique kingdom	755
Messina	403	channel	14
Mesunrade river	774	Moscow	199
Metz	270	Moselle river	248
Meuse river	240	Moskoestrom whirlpool	155
Miaeo	528	Motala river	180
Middleburg	236	Montan	589
Middleton's island	680	Mulhausen	300
Milan	388	Mull isle	121
Milo island	433	Munich	307
Mioss lake	153	Murcia	357
Minho river	363	Musele Bay	767
Miudanao island	669	Myconi island	432
Minorca island	367	Mysol island	671
Misitra	424	Mytilene island	454
Mineralogy and mineral waters of		Nagasaki	528
Arabia	657	Namur	216
Austria	331	Naney	270
Birnan Empire	544	Nankin	487
Bucharia	638	Nantes	269
Ceylon	599	Naples kingdom	396
China Proper	494	city	397
Chinese Tartary	502	Nassau, House of	303
Denmark	166	or Poggy islands	665
Egypt	741	Natal	756
England	80	Natron lakes	739
France	282	Navigation, inland, of	
Hindostan	581	Birman Empire	541
Holland	240	China Proper	488
Japan	532	Denmark	163
Ireland	140	England	68
Italy	387	France	274

INDEX.

827

Page.		Page
Navigation, inland, of		207
Hindostan	570	13
Holland	237	183
Ireland	135	303
Netherlands	247	285
Prussia	224	766
Russia in Europe	201	209
Scotland	106	427, 457
Sweden	178	245
Navigators islands	684, 697	207
Navy of Algiers	717	16
Austria	319	698
Birman Empire	538	376
Denmark	160	719
England	49	359
France	262	408
Italy	393	123
Morocco	704	269
Naples	397	449
Persia	609	500
Portugal	372	246
Russia in Europe	197	691
Siam	550	692
Sicily	401	57
Spain	350	697
Sweden	174	394
Turkey	417	402
Naxia or Naxas island	432	790
Neagh lake	138	442
Neeker river	292	407
Negropont island	431	680
Nepaul or Nipal	513	681
Nepeau island	680	267
Nerbudda river	575	390
Netherlands	241	428
original population of	243	433
Neuille bridge	273	585
Neusidler	329	395
Neva river	207	599
New-Britain island	685	540
New-Caledonia	684	207
New-Hebudes	684	287
New-Holland	675	688
New-Ireland	684	600
New-Zealand	684	601
Nieper river	206	602
Niester river	207	12
Niger river	19	104
Nile river	19	324
Nimeguen	236	200
Nio islands	433	199
Nismes	270	207
Nordkioping	177	422
Norfolk island	680	668
Norway	147	390
original population of	148	466
progressive geography of	149	767
mountains of	153	385
Nova Zembla	212	Political importance of
Nubia	741	Birman Empire
Nuremberg	307	China Proper
Oases of Africa	24	Denmark
Oby Gulf	13	France
river	18	Germany
Ochill hills	113	Hindostan
Odensee	163	Japan
Oder river	225	Ireland
Oitz lake	530	Persia

INDEX.

	Page		Page
Political importance of Siam	550	Rasht	613
Spain	361	Ratisbon	309
Poland	212	Ravenna	395
Polynesia	687	Red Sea	12
Pomerania, Swedish	305	Reggio	399
Porto Santo island	788	Religion of Abyssinia	748
Portugal	369	Algiers	717
Posen or Posna	298	Arabia	645
Potsdam	223	Austria	317
Population of Abyssinia	749	Birman Empire	537
Africa	701	Bucharia	633
Algiers	717	Ceylon	597
Austria	318	China Proper	479
Birman Empire	537	Chinese Tartary	497
Ceylon	597	Denmark	158
China Proper	483	Egypt	729
Chinese Tartary	497	England	39
Denmark	159	France	290
Egypt	730	Germany	289
England	48	Good Hope, Cape of	758
France	261	Hindostan	566
Germany	290	Holland	232
Good Hope, Cape of	768	Japan	523
Hindostan	567	Ireland	129
Japan	524	Italy	384
Ireland	131	Lapland	143
Italy	384, 393	Morocco	703
Lapland	143	Naples	397
Morocco	703	Nepaul	514
Naples	397	Netherlands	244
Nepaul	513	Persia	607
Netherlands	244	Poland	214
Norway	150	Portugal	371
Persia	609	Prussia	220
Poland	215	Russia	195, 459
Portugal	372	Scotland	96
Prussia	221	Siam	549
Russian Empire	189	Sicily	401
in Asia	460	Spain	348
Siam	549	Sweden	172
Scotland	99	Switzerland	335
Sicily	401	Tartary, Independent	627
Spain	349	Turkey	415
Sweden	173	Retimo island	431
Switzerland	336	Reussen, house of	305
Tartary, Independent	627	Revenue of Abyssinia	750
Tibet	506	Algiers	717
Turkey in Europe	417	Austria	319
Turkey in Asia	442	Birman Empire	538
World	9	China Proper	483
Prague	323	Denmark	160
Pregel river	225	Egypt	731
Presburg	324	England	50
Princes island	790	France	262
Prusa	444	Germany	290
Prussia	216	Good Hope, Cape of	758
original population of	218	Ganggetic Hindostan	585
progressive geography of	218	Hindostan	567
Pyramids of Egypt	728	Holland	238
Pyrenees	279	Japan	525
Quarnaro isles	395	Ireland	131
Quiloa kingdom	755	Italy	393
Raab	325	Morocco	704
Rabat	707	Naples	397
Rackama lake	450	Norway	150
Rands lake	153	Persia	609
Rangoon	541	Poland	215
Rannock moor	116	Portugal	378

	Page.		Page.
Revenue of Prussia	221	Seio island	454
Russia in Europe	197	Seboo river	712
Siam	550	Scilly isles	89
Sicily	401	Scotland	91
Spain	350		original population of progressive geography of
Sweden	174	Sego	93
Switzerland	336	Seine river	93
Tibet	507	Selinga river	778
Turkey	417	Senegal river	278
Rheims	270	Sennaar	466
Rhine river	239, 292	Serai or Serajo	774
Rhodes island	455	Serawoolies	742
Rhone river	277	Seringapatam	423
Riga	200	Serra d'Estrella	780
Ringkiobing bay	166	Serra Monchique	593
Roads of China Proper	488	Severn river	379
France	273	Seville	379
Ireland	135	Shannon river	77
Norway	152	Shetland isles	356
Sweden	178	Shiraz	137
Rochefort	272	Siam	125
Rochelle	272		612
Roggeveld mountains	764		547
Rome	388		original population of progressive geography of
Rona isles	122	Sicily	548
Roraas copper mine	154		548
Rosetta	735	Sierra de Molina mountains	400
Rostock	302	Nivada mountains	364
Rotterdam	235	Sierra Leone	364
Rouen	269	river	774
Russian Empire	184	mountains	775
Russia in Europe	189	Silver mine of Kolhyvan	211
	original population of	Kongsberg	154
	progressive geography of		
Russia in Asia	190	Sinai mount	654
Sabia or Sedanda	456	desert	654
Saffae	756	Sindetic Hindostan	587
Sagaljan island	708	Sire	751
Sahara	502	Sirian	541
Sahara desert	783	Sirr river	637
Saldanha Bay	24	Sitang river	542
Salm, house of	766	Siut or Assiut	735
Salonica, gulf of	305	Siwah	785
Saloniki	427	Skey isle	122
Salt mines of Austria	422	Slavonians	190, 191
Salee	332	Smyrna	446
Salwatti island	708	Soan river	574
Samarcand	682	Society isles	693
Sambre river	634	Socotra isle	658
Samos island	248	Sofala	756
Sana or Saana	454	Soil. See Agriculture	
Sandwich isles	650	Solomon islands	683
Santorini island	691	Sooloo isles	668
Sarabat river	434	Sophia	423
Saragossa	449	Soudan	423
Sardinia	358	Spain	773
Sari	407		344
Sasari	613		original population of progressive geography of
Saxe, House of	408	Spanish empire	345
Saxony	303	Spelding See	347
Schaff hausen	296	Spey river	225
Scheldt	338	Spice islands	110
Schemnitz	248	Stafia	670
Schleswick	325	Stanovi ridge of mountains	121
Schouwen island	163	Stepps of Russia in Asia	467
Schwarzburg, House of	240	Stepp of Siberia	468
Schweinfuat	304	Sterling	25
Schwerin	307	Stettin	105
	302	Stockholm	223
			176

INDEX.

	Page.		Page.
Strasburg	269	Tranquebar	594
Suakem	746	Travelling, state of, among the Turks	425
Suez	651, 735	Trent	307
Sumatra island	661	Trieste	325
Sunday river	766	Tripoli	724
Surat	591	Tschuvashes	193
Suse river	713	Tuarick	783
Svir river	207	Tula	201
Sweden	168	Tunis,	721
original population of	170	city	722
progressive geography of	170	Tunquin kingdom	519
Switzerland	333	Turfan	499
original population of	334	Turin	389
Swuckustoet mountain	153	Turkey in Asia	441
Syene	735	in Europe	412
Syracuse	403	original population of	441
Syrian Christians	595	Tweed river	109
Szegedin	324	Tyre	447
Tabarka island	724	Tyri lake	153
Table mountain	764	Tyrolese Alps	306
Tagus river	363	Tzana or Dembea lake	758
Tana river	145	Valday mountains	208
Tangier	709	Valencia	355
Taranto	398	Valenciennes	246
Tartary, Independent	625	Vallette, city of	409
Tatya	589	Valladolid	359
Taurian mountains	450	Vallais	342
Tay river	109	Van lake	449
Tchoka island	502	Vandiemen's land	686
Tebriz or Tawriz	613	Vardari	426
Tessiliz	612	Ubes, St. or Setuval	377
Teis river	328	Vecchia Civita	409
Teneriffe	790	Venice	393
Tensift river	712	Verona	394
Terkire lake	510	Versailles	271
Ternat island	672	palace	273
Terradant	707	Vesuvius mount	586
Tetvan	708	Vienna	323
Texel island	241	Visiapou	595
Thaluan river	742	Vistula river	225
Thames river	77	Vitima river	18
Thereseinstadt	324	Ulubad lake	450
Thomas St. island	791	United Principalities	308
Tibboos	788	Universities of Austria	322
Tiber river	385	England	57
Tibet or Tangut	505	Germany	289
progressive geography of	505	Hindostan	570
Tidsi river	713	Ireland	132
Tigris river	448	Netherlands	244
Timor island	666	Poland	215
Timorlaut island	682	Portugal	374
Tino island	432	Russia in Europe	199
Tinto river	363	Scotland	102
Tipteri nation	193	Spain	354
Tirey isle	122	Sweden	176
Tleinzen	719	Volcanos of Japan	530
Tobolsk	463	Voorn island	240
Tokat	245	Upsala	177
Toledo	359	Upsal university	176
Tolen island	240	Ural mountains	23
Tombuctoo	782	Urmia lake	619
Tonningen	163	Usbecks	633, 634
Tonquin gulf	13	Utrecht	236
Tornea	144	Waldeck, principality of	305
river	145	Waijoo or Wadjoos isle	682
Toulon harbor	271	Warsaw	297
Toulouse	269	Wassela kingdom	778
Tournay	245	Waterford	134

INDEX.

831

Page.		Page.
180	Zoology of Chinese Tartary	501
291	Denmark	166
299	Egypt	740
180	England	84
16	France	281
134	Germany	295
771	Hindostan	580
12	Holland	240
201	Japan	531
298	Ireland	140
20	Italy	570
777	Lapland	146
307	Morocco	714
308	Nepaul	516
466	New-Holland	679
464	Norway	153
777	Persia	621
499	Portugal	370
13	Prussia	226
18	Russia in Europe	210
463	Russia in Asia	470
246	Scotland	118
110	Siam	554
552	Sicily	406
410	Sweden	182
156	Switzerland	341
684	Tibet	511
793	Turkey in Europe	428
656	Turkey in Asia	453
330	Zouf	685
544	Zurich	337
599	Zuyder Zee	239
493	Zwartecaps or Algoa Bay	767

F I N I S.

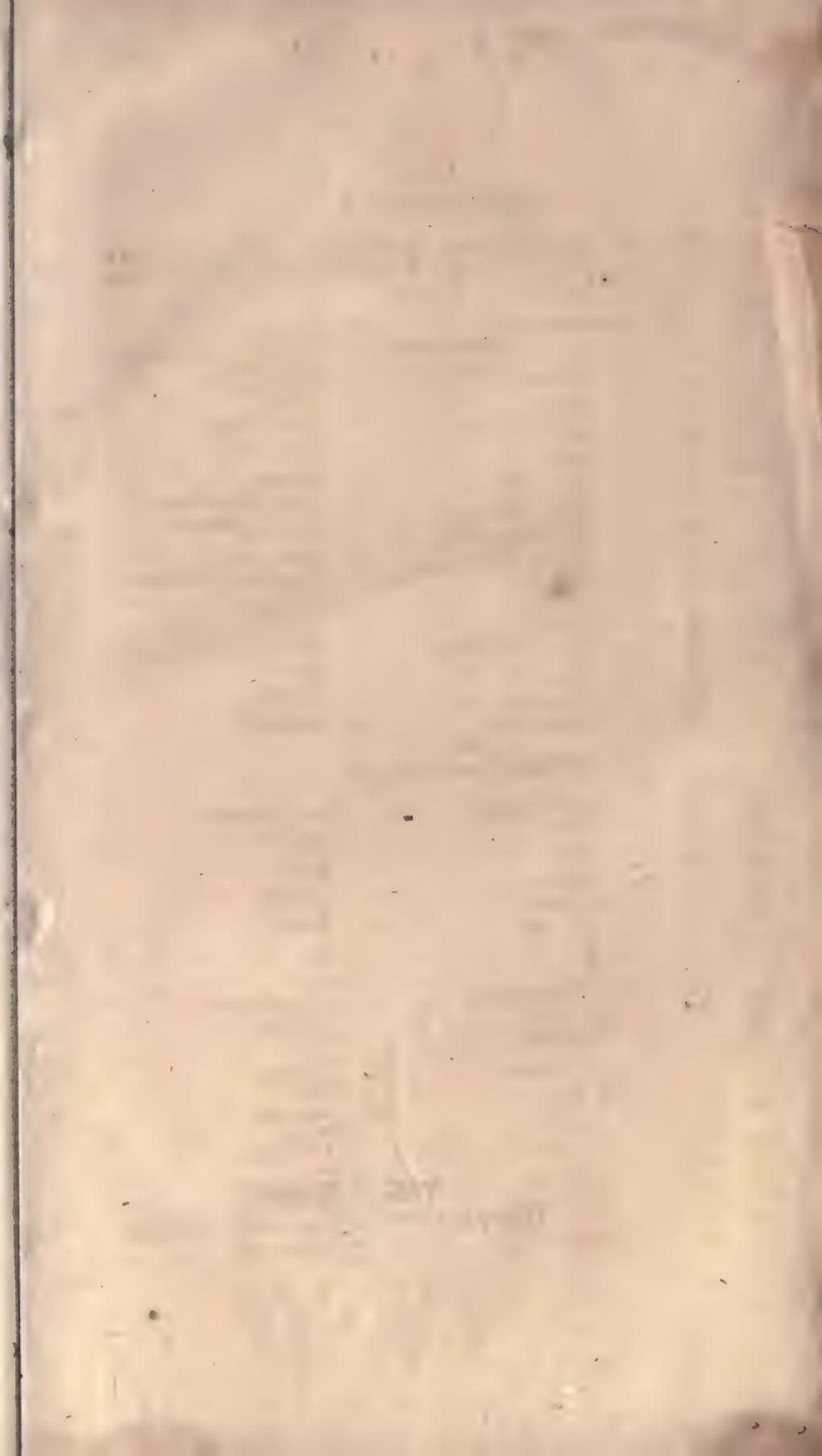
ERRATA—VOL. I.

In a work of this kind, containing so many uncommon names, and printed, in great part from manuscript, will not be expected to be wholly free from errors of the press. The Reader is requested to correct the following.

<i>Page.</i>	<i>Line.</i>	<i>For—dimunition.</i>	<i>Read—diminution.</i>
32	31	— <i>in winter than in summer,</i>	— <i>in summer than in winter.</i>
33	10	— <i>thaſ children,</i>	— <i>the children.</i>
90	6	— <i>Bedowns,</i>	— <i>Bedouins.</i>
—	28	— <i>virtue,</i>	— <i>virtues.</i>
94	16	— <i>Presbyterians,</i>	— <i>Episcopilians.</i>
96	13	— <i>Petshora,</i>	— <i>the Petshora.</i>
99	24	— <i>3320,</i>	— <i>3230.</i>
102	16	— <i>Mississippi,</i>	— <i>Missinipi.</i>
106	25	— <i>great bend,</i>	— <i>mouth of the Missouri.</i>
124	11	— <i>gulf of Mexico,</i>	— <i>gulf of California.</i>
129	7	— <i>Sir David Keith,</i>	— <i>Sir David.</i>
157	29	— <i>Rising Lake,</i>	— <i>Rainy Lake.</i>
169	13	— <i>American Methodists,</i>	— <i>Armenian Methodists.</i>
189	49	— <i>Hudson,</i>	— <i>James.</i>
226	13	— <i>400 feet,</i>	— <i>4000 feet.</i>
384	10	— <i>Corchangz,</i>	— <i>Corchaugs.</i>
386	21	— <i>Oyster Point Bay,</i>	— <i>Oyster Pond Point.</i>
387	28	— <i>influence,</i>	— <i>affluence.</i>
468	39	— <i>Escetan,</i>	— <i>Escelen.</i>
614	12	— <i>cultivation,</i>	— <i>cultivators.</i>
615	18	— <i>unsuccessful,</i>	— <i>successful.</i>

ERRATA—VOL. II.

<i>Page.</i>	<i>Line.</i>	<i>For,</i>	<i>Read,</i>
23	37	— <i>Bled-el-Jezrede,</i>	— <i>Bled-el-Jerrede.</i>
25	16	— <i>began,</i>	— <i>be given.</i>
25	40	— <i>these,</i>	— <i>three.</i>
27	23	— <i>Kaff,</i>	— <i>Kaffa.</i>
42	41	— <i>diffidents,</i>	— <i>dissidents.</i>
89	23	— <i>215,000,</i>	— <i>21,500.</i>
172	5	— <i>Wisbray,</i>	— <i>Wisbuy.</i>
218	3	— <i>of,</i>	— <i>or.</i>
284	32	— <i>E.</i>	— <i>W.</i>
287	4	— <i>are,</i>	— <i>were.</i>
288	18	— <i>, except—These,</i>	— <i>. Except—these.</i>
346	17	— <i>to have,</i>	— <i>as having.</i>
377	11	— <i>Evovra,</i>	— <i>Evora.</i>
387	16	— <i>west,</i>	— <i>east.</i>
407	5	— <i>uncultivated,</i>	— <i>cultivated.</i>
—	24	— <i>4000,</i>	— <i>3000.</i>
424	18	— <i>Athnians,</i>	— <i>Athenians.</i>
—	26	— <i>Mistria,</i>	— <i>Misitra.</i>
704	18	— <i>Tarudant,</i>	— <i>Terodant.</i>
713	48	— <i>cask,</i>	— <i>cork.</i>
716	24	— <i>Numisia,</i>	— <i>Numidia.</i>
717	1	— <i>Maraboiets,</i>	— <i>Marabouts.</i>
729	7	— <i>4 feet,</i>	— <i>4 feet wide.</i>
757	20	— <i>Stellenborch,</i>	— <i>Stellenbosch.</i>



**THE LIBRARY
UNIVERSITY OF CALIFORNIA
LOS ANGELES**



UNIVERSITY OF CALIFORNIA LIBRARY
Los Angeles

This book is DUE on the last date stamped below.

NOV 2 1955		
OCT 30 1958		
REC'D LD-URD		
ED URL FEB 11 1974		
FEB 3 1974		
DISCHARGE-URL		
DL APR 3 1978		
DL 21 1978		
REC'D LD-URD		
DL JAN 11 1980		
JAN 12 1988		

UC SOUTHERN REGIONAL LIBRARY FACILITY



AA 000 136 601 2



3 1158 00166 7186

WV

